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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's full Name: Everett White Examiner #: 67057 Date: 11/12/2002
Art Unit: 1623 Phone Number 308-4621 Serial Number: 09/982,077
Mail Box: CM1-8B19 and Bldg/Room Location: CM1-8D12 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be search Include the elected species or structures, key words, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: See Bib Data Sheet

Inventors (please provide full names): See Bib Data Sheet

Earliest priority Filing Date: See Bib Data Sheet

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the acylated cellobiose of Claims 1-23; the method for preparing the acylated cellobiose of Claims 24-26; and the method of thickening or structuring a water-immiscible liquid to for a cream, soft solid or solid of Claim 27. A search of the formula for the acylated cellobiose that is disclosed in Claims 1 and 24 is also requested. Also, a search of the composition of Claims 28-50 and the cosmetic use of the composition of Claim 51 is also requested. A copy of the claims and abstract is provided.

The Bib Data Sheet which discloses the inventor names, title of the invention, and the earliest priority filing date is also provided.

STAFF USE ONLY

Point of Contact:	Type of Search	Vendors and cost where applicable
Searcher: <u>Alexandra Wacławiw</u>	NA Sequence (#) _____	STN _____
Searcher Phone: <u>CM1-6A02 Tel: 308-4494</u>	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>(2)</u>	Questel/Orbit _____
Date Searcher Picked Up: <u>11-18</u>	Bibliographic _____	Dr. Link _____
Date Completed: <u>11-18</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>21</u>	Fulltext _____	Sequence Systems _____
Clerical prep time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>45</u>	Other _____	Other (specify) _____

PTO-1590 (1-2000)

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White 09/982,077

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(FILE 'HCAPLUS' ENTERED AT 10:03:09 ON 18 NOV 2002)
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FILE 'REGISTRY' ENTERED AT 10:03:36 ON 18 NOV 2002
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L3 371 SEA FILE=REGISTRY ABB=ON PLU=ON L2/COMP

ACT WHITESUB/A

L4 STR
L5 STR
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L8 102 SEA FILE=REGISTRY SUB=L7 SSS FUL L4

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L11 107079 S COSMET? OR 62/SX,SC
L12 147 S L9 NOT L10
L13 5 S L12 AND L11
L14 12 S L12 AND 63/SX,SC
L15 16 S L14 OR L13
SET SFIELD BI
L16 439726 S CREAM OR LOTION OR OINTMENT# OR TOPICAL OR WATER (3A) IMMISCI
L17 ~~3 S L16 AND L15~~

ignore highlighting

=> fil reg

FILE 'REGISTRY' ENTERED AT 10:08:51 ON 18 NOV 2002
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STRUCTURE FILE UPDATES: 15 NOV 2002 HIGHEST RN 473758-49-5
 DICTIONARY FILE UPDATES: 15 NOV 2002 HIGHEST RN 473758-49-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
 PROPERTIES for more information. See STNote 27, Searching Properties
 in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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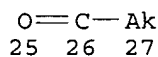
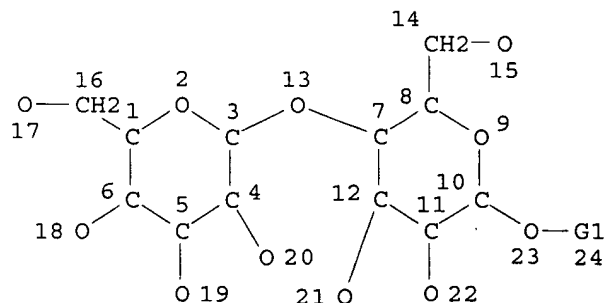
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L1 STR



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 at least one
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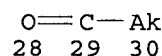
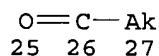
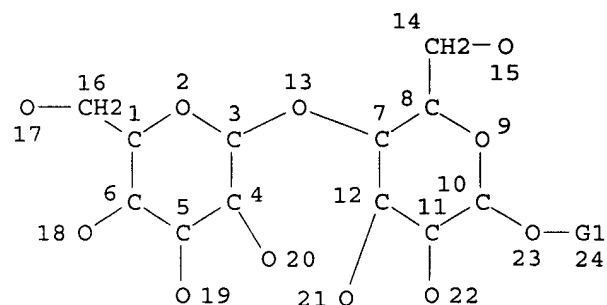
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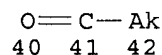
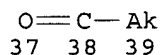
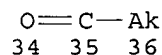
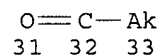
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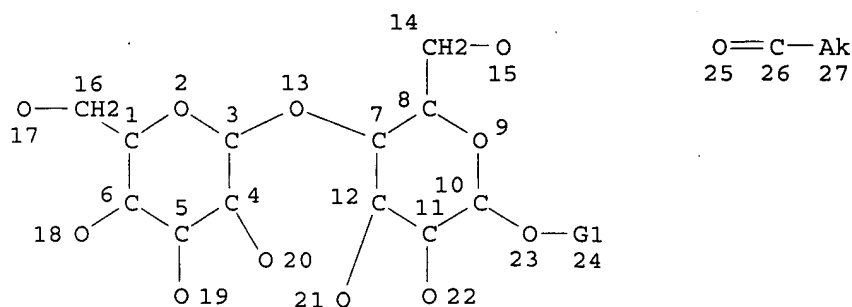
narrower search
 at least 6 acyl
 groups.



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STEREO ATTRIBUTES: NONE
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GRAPH ATTRIBUTES:
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100.0% PROCESSED 345 ITERATIONS (1 INCOMPLETE) 102 ANSWERS
 SEARCH TIME: 00.01.43

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FILE COVERS 1907 - 18 Nov 2002 VOL 137 ISS 21
 FILE LAST UPDATED: 17 Nov 2002 (20021117/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use

the CAS Roles thesaurus (/RL field) in this file.

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L12     147 S L9 NOT L10
L13     5 S L12 AND L11
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L15     16 S L14 OR L13
        SET SFIELD BI
L16     439726 S CREAM OR LOTION OR OINTMENT# OR TOPICAL OR WATER (3A) IMMISCI
L17     (3 S L16 AND L15
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FILE 'REGISTRY' ENTERED AT 10:08:51 ON 18 NOV 2002

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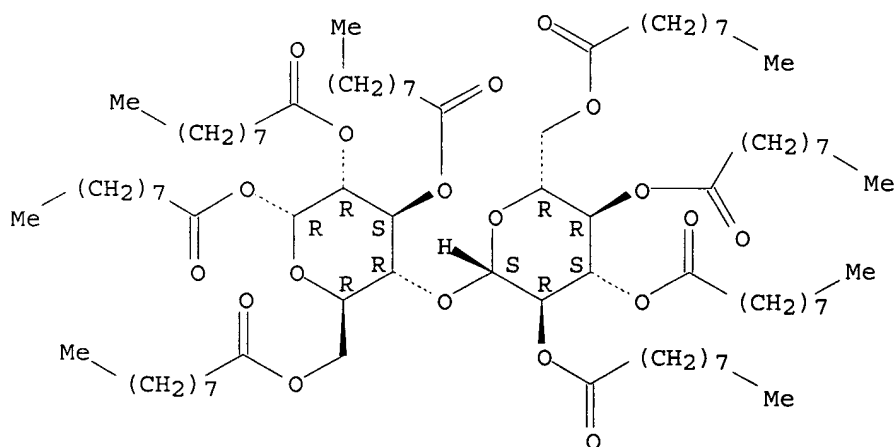
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L10 ANSWER 1 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:714120 HCAPLUS
DOCUMENT NUMBER: 137:252741
TITLE: Antiperspirant formulations containing polyhydric
        alcohols and silicones
INVENTOR(S): Abend, Sven Jorg Willi Max; Courtois, Jean-Philippe
        Andre Roger; Cropper, Martin Peter; Fletcher, Neil
        Robert; Grainger, Lynda; Murphy, Angela Mary
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N.V.
SOURCE: Eur. Pat. Appl., 15 pp.
        CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1240893	A2	20020918	EP 2002-251682	20020308
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:		GB 2001-6601 A 20010316		
AB Structured antiperspirant emulsion formulations for topical application to human skin in a method for controlling sweat and body odor generation comprising a hydrophilic phase contg. an aluminum and/or zirconium astringent salt dispersed in a structured continuous oil phase can suffer				

from problems of impaired sensory properties and impaired efficacy (sweat redn.). Such problems are overcome in structured antiperspirant emulsions in which the hydrophilic phase comprises 25-55%, the hydrophilic phase contains 0-15% polyhydric alc. by wt., and the emulsifier comprises an alkyl dimethicone copolyol, the wt. ratio of the hydrophilic phase to the emulsifier is selected in the range of 60:1, the structurant comprises an acylated sugar and the water-immiscible oil and the structurant are present in a wt. ratio of from 1.5:1 to 8.5:1. Thus, a formulation contained Silkflo-364 28.20, DC-245 18.80, cellobiose octanonanoate 15.00, Abil EM90 0.50, water 15.00, Rezal 36GP 22.50, and dispersed phase wt. 37.5%.

IC A61K007-32
 CC 62-5 (Essential Oils and Cosmetics)
 IT 56-81-5, Glycerol, biological studies 57-55-6, Propylene glycol, biological studies 528-50-7D, Cellobiose, acyl derivs. 541-02-6, Dow Corning 245 7631-86-9, Silica, biological studies 25189-70-2D, 1-Decene, homopolymer, hydrogenated 25265-71-8, DiPropylene glycol 111643-34-6, HDK-H 30 118367-64-9, Rezal 36GP 134910-86-4, Zirconal 50 145686-34-6, Abil EM90 172585-66-9 460048-47-9, Silkflo 364
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (antiperspirant formulations contg. polyhydric alcs. and silicones)
 IT 172585-66-9
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (antiperspirant formulations contg. polyhydric alcs. and silicones)
 RN 172585-66-9 HCAPLUS
 CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002:640664 HCAPLUS
 DOCUMENT NUMBER: 137:159011
 TITLE: Fatty acid esters of maltose for use in cosmetics
 INVENTOR(S): Franklin, Kevin Ronald; Lasbistes, Nicolas; Webb, Nicholas; White, Michael Stephen
 PATENT ASSIGNEE(S): Unilever P.L.C., UK
 SOURCE: Brit. UK Pat. Appl., 80 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2368011	A1	20020424	GB 2000-25439	20001017
US 2002076386	A1	20020620	US 2001-982150	20011017

PRIORITY APPLN. INFO.: GB 2000-25439 A 20001017

AB A cosmetic compn., preferably an antiperspirant compn., in solid or soft-solid form has a continuous phase which contains a water-immiscible liq. carrier and also contains a sturcturant which is partially or fully esterified .alpha.- or .beta. anomer of maltose. A mixt. of .alpha.-anomer and .beta.-anomer of maltose octadecanoate was prepd. by the reaction of maltose with sodium dodecanoate. An antiperspirant stick contained above acylated maltose 5, cyclomethicone DC-245 44, cetyl dimethicone copolyol 1, and Rezal-67 50%.

IC ICM A61K007-00

ICA A61K007-32

CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 33

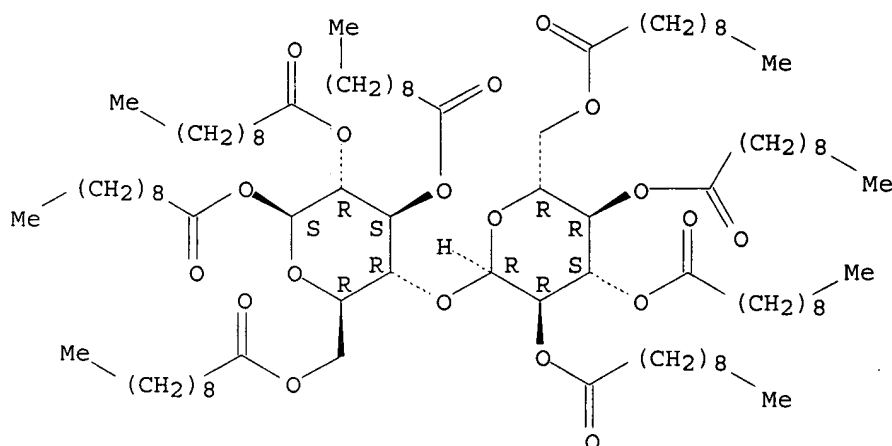
IT 69-79-4DP, Maltose, esters with fatty acids **445381-82-8P**
445381-84-0P 445381-86-2P 445381-88-4P
445478-00-2P 445478-01-3P 445478-02-4P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fatty acid esters of maltose for use in cosmetics)

IT **445381-82-8P 445381-84-0P 445381-86-2P**
445381-88-4P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fatty acid esters of maltose for use in cosmetics)

RN 445381-82-8 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.alpha.-D-glucopyranosyl]-, tetradecanoate (9CI) (CA INDEX NAME)

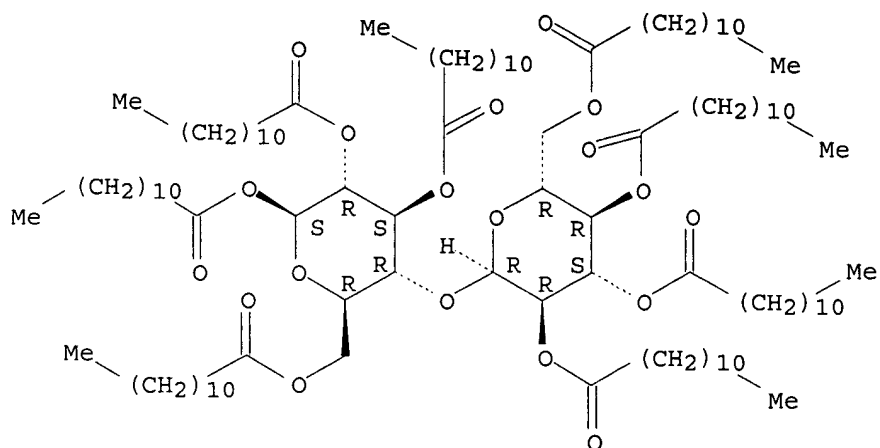
Absolute stereochemistry.



RN 445381-84-0 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.alpha.-D-glucopyranosyl]-, tetradodecanoate (9CI) (CA INDEX NAME)

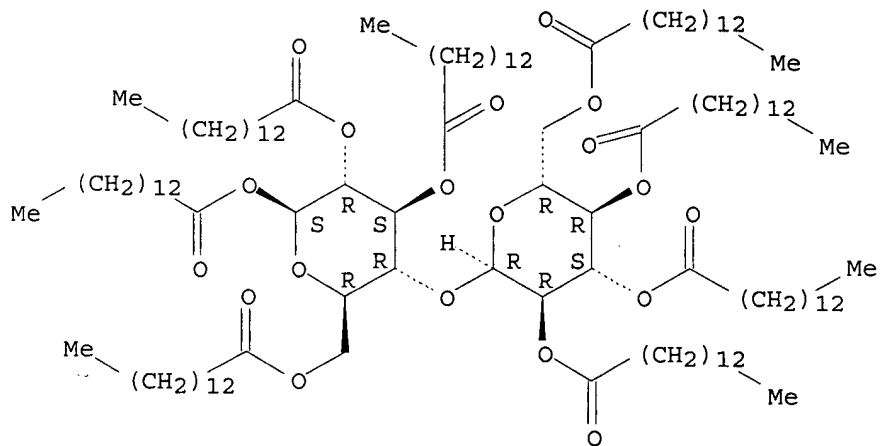
Absolute stereochemistry.



RN 445381-86-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-.alpha.-D-glucopyranosyl]-, tetratetradecanoate (9CI) (CA INDEX NAME)

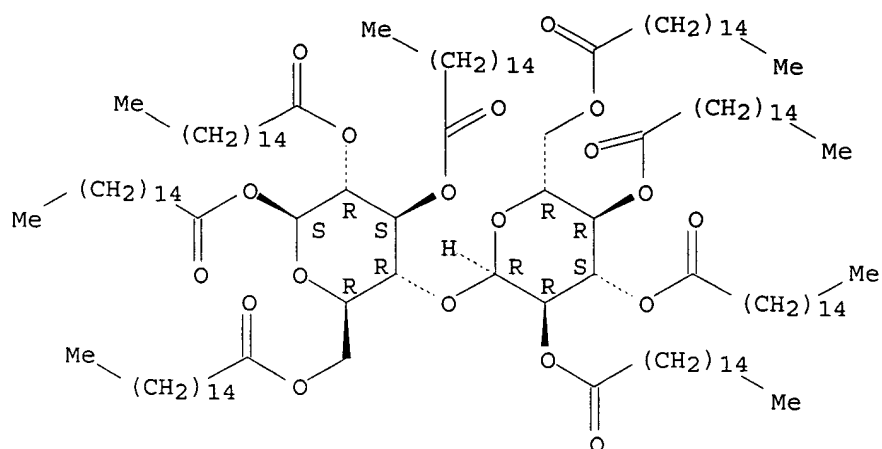
Absolute stereochemistry.



RN 445381-88-4 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxohexadecyl)-.alpha.-D-glucopyranosyl]-, tetrahexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:314952 HCAPLUS

DOCUMENT NUMBER: 136:345481

TITLE: Preparation of cellobiiose esters for use in cosmetics

INVENTOR(S): Franklin, Kevin Ronald; Hopkinson, Andrew; Webb, Nicholas; White, Michael Stephen

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever Limited

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

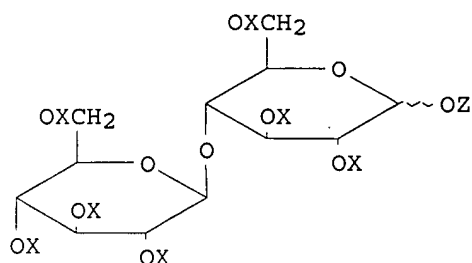
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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AU 2001093827	A5	20020429	AU 2001-93827	20010918
US 2002072506	A1	20020613	US 2001-982077	20011017
PRIORITY APPLN. INFO.:			GB 2000-25437	A 20001017
			WO 2001-EP10869	W 20010918

GI



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AB Acylated cellobiose compds. (CHME) which satisfy the formula I wherein X represents an acyl group (R-CO-) or H, Z represents an acyl group (R-CO-) or H and not more than a minority of X + Z residues represent H; R represents a satd. or unsatd., linear or branched chain hydrocarbon residue of 5 to 31 carbon atoms and R represents a residue, different from R, which is: (i) a satd. or unsatd., linear or branched chain hydrocarbon residue of 1 to 31 carbon atoms, or (ii) an arom. hydrocarbon residue, or (iii) a cycloaliph. hydrocarbon, each optionally substituted. CHME esters are particularly suited to thickening or structuring a water-immiscible liq., for example, a phase in a cosmetic formulation, such as antiperspirant or deodorant formulations, eg water in oil emulsions and esp. translucent ones. Cellobiose heptanonanoate benzoate ester (II) was prepd. by the reaction of cellobiose heptanonanoate (prepn. given) with benzoyl chloride. II was used to gel water-immiscible cosmetic liqs.

IC ICM C07H013-00

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 24

IT 415681-14-0P 415681-15-1P 415681-16-2P
 415681-17-3P 415681-18-4P 415681-19-5P
 415681-20-8P 415681-21-9P 415681-22-0P
 415681-23-1P 415681-24-2P 415681-25-3P
 415681-26-4P 415681-27-5P 415681-28-6P
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RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cellobiose esters for use in cosmetics)

IT 139432-95-4P, .beta.-Cellobiose octanonanoate 415681-40-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of cellobiose esters for use in cosmetics)

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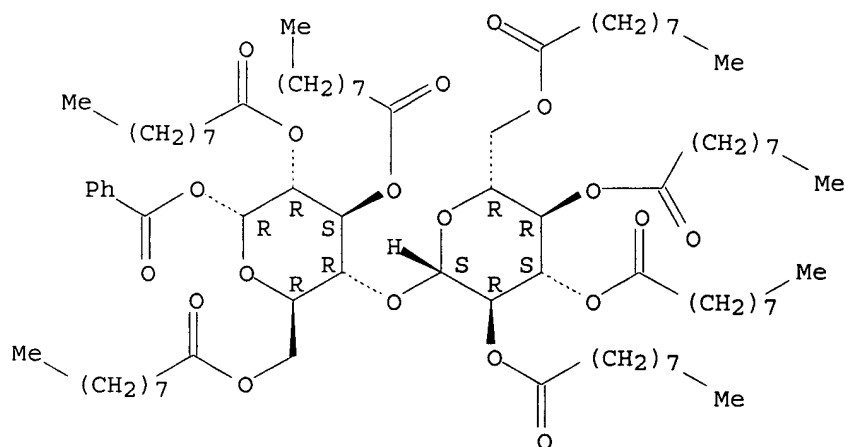
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RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of cellobiose esters for use in cosmetics)

RN 415681-14-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

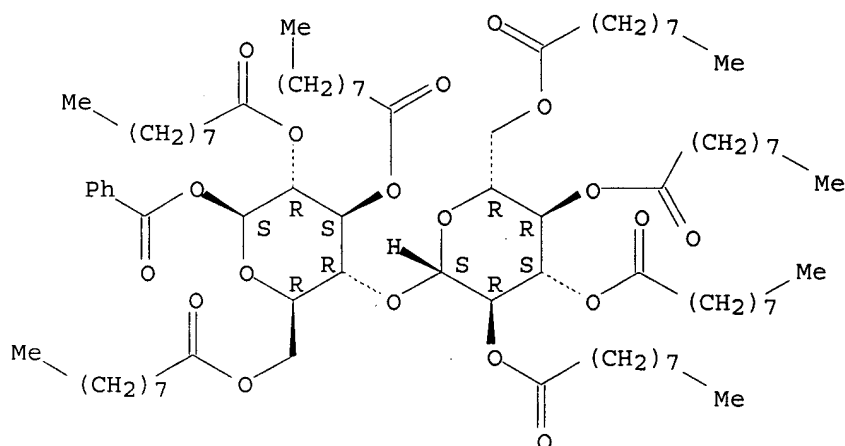
Absolute stereochemistry.



RN 415681-15-1 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

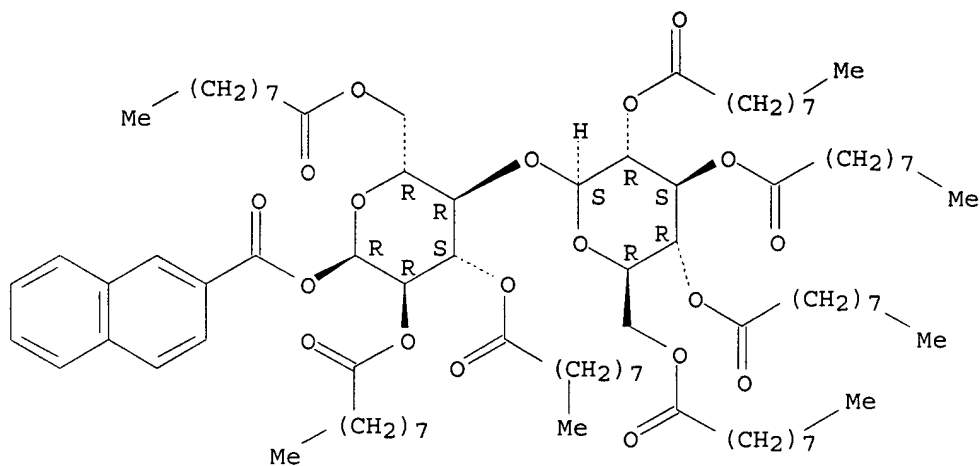


RN 415681-16-2 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-(2-naphthalenecarboxylate) 2,3,6-trinonanoate (9CI)

(CA INDEX NAME)

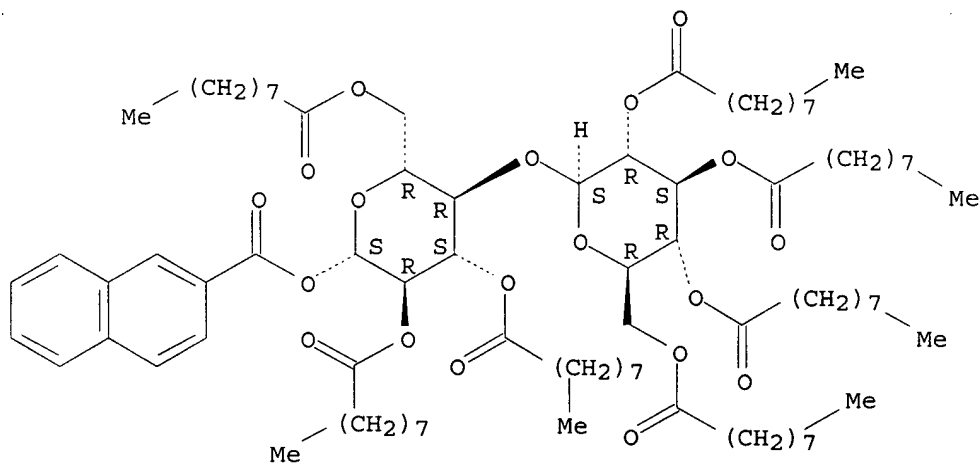
Absolute stereochemistry.



RN 415681-17-3 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-(2-naphthalenecarboxylate) 2,3,6-trinonanoate (9CI)
(CA INDEX NAME)

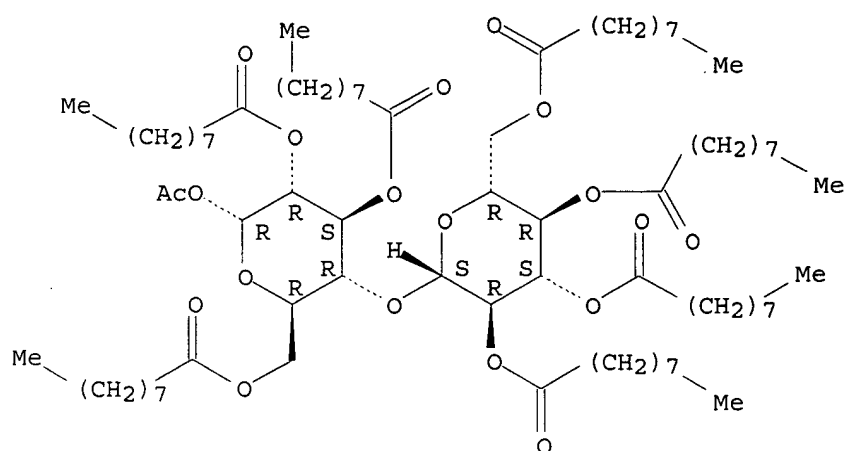
Absolute stereochemistry.



RN 415681-18-4 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

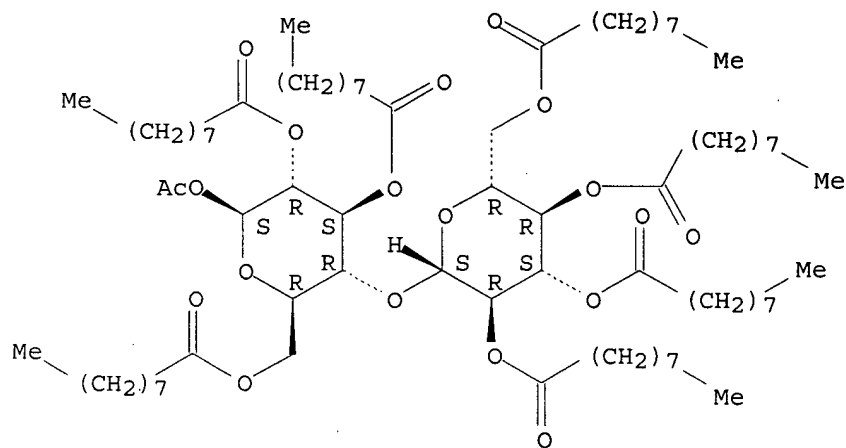
Absolute stereochemistry.



RN 415681-19-5 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

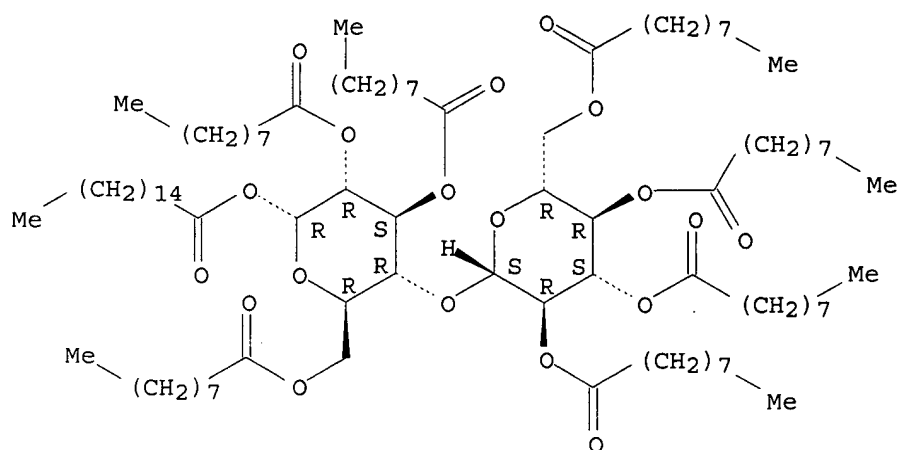
Absolute stereochemistry.



RN 415681-20-8 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexadecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

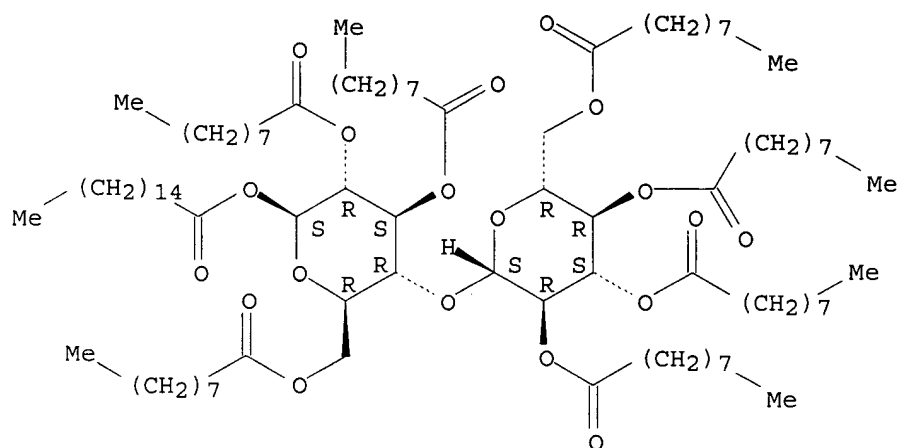
Absolute stereochemistry.



RN 415681-21-9 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexadecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

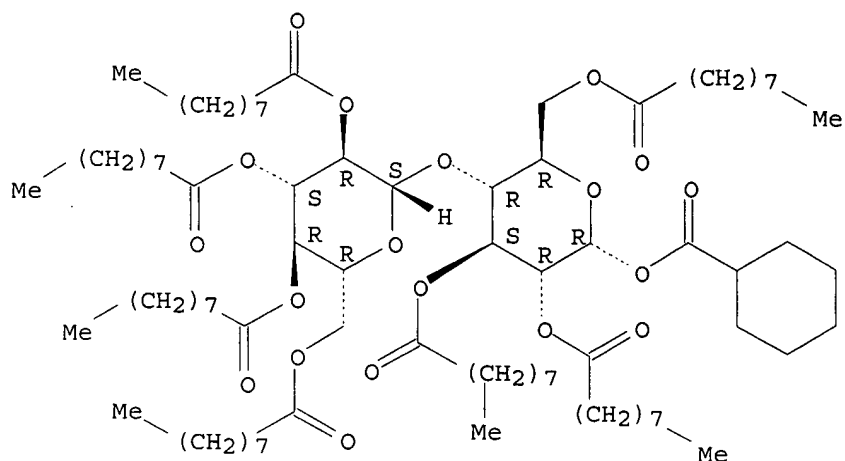
Absolute stereochemistry.



RN 415681-22-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

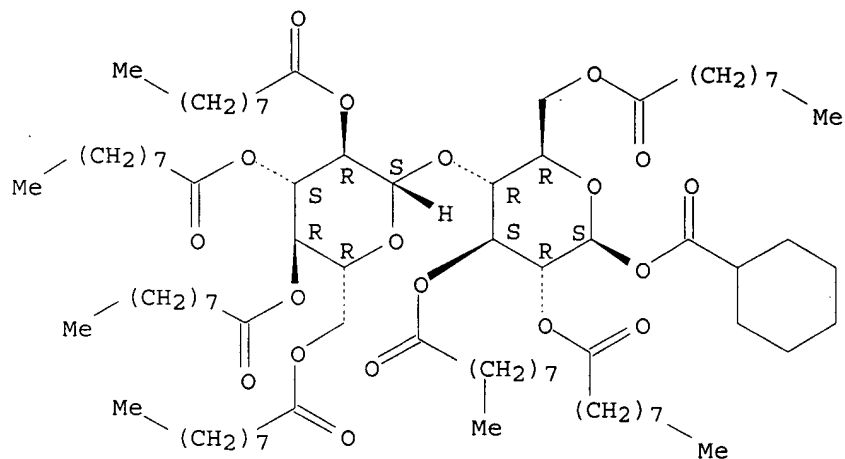
Absolute stereochemistry.



RN 415681-23-1 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

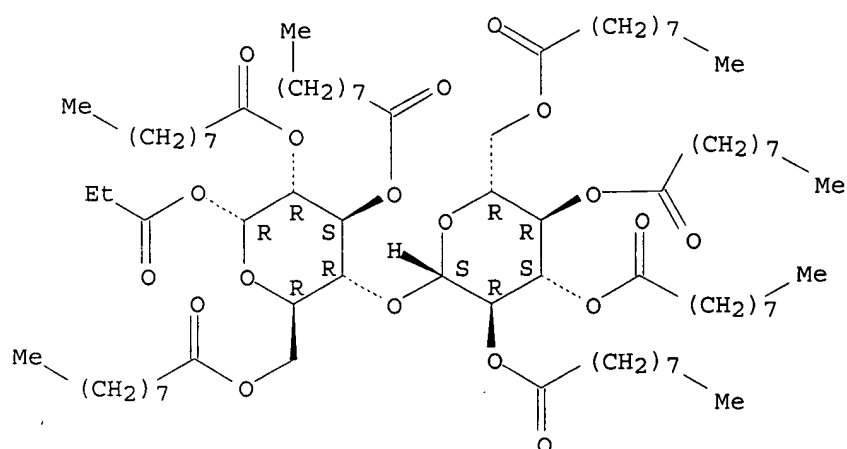
Absolute stereochemistry.



RN 415681-24-2 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-propanoate (9CI) (CA INDEX NAME)

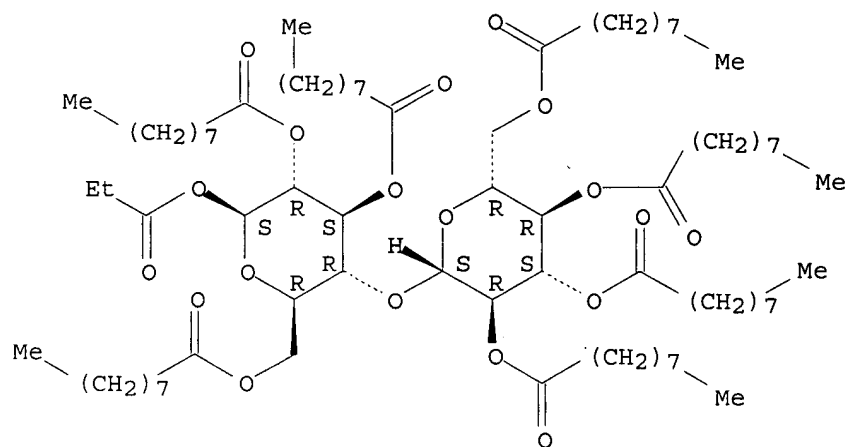
Absolute stereochemistry.



RN 415681-25-3 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-propanoate (9CI) (CA INDEX NAME)

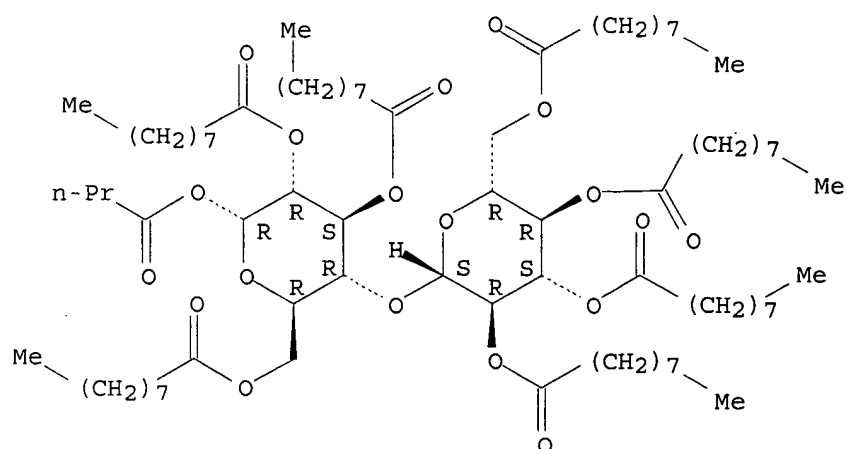
Absolute stereochemistry.



RN 415681-26-4 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-butanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

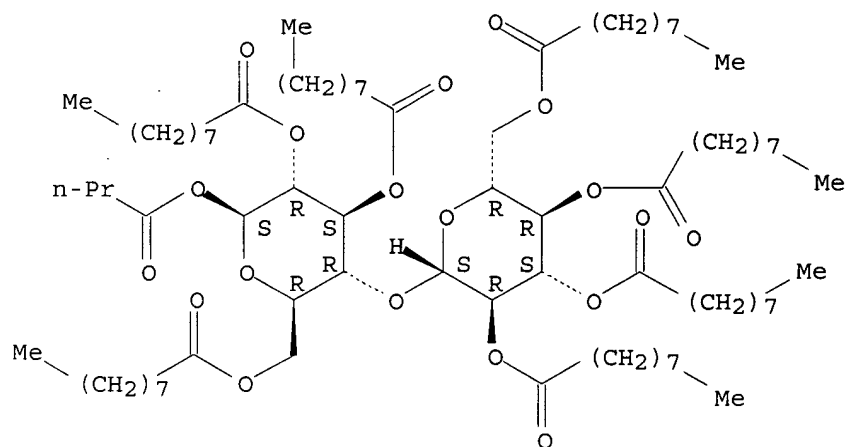
Absolute stereochemistry.



RN 415681-27-5 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-butanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

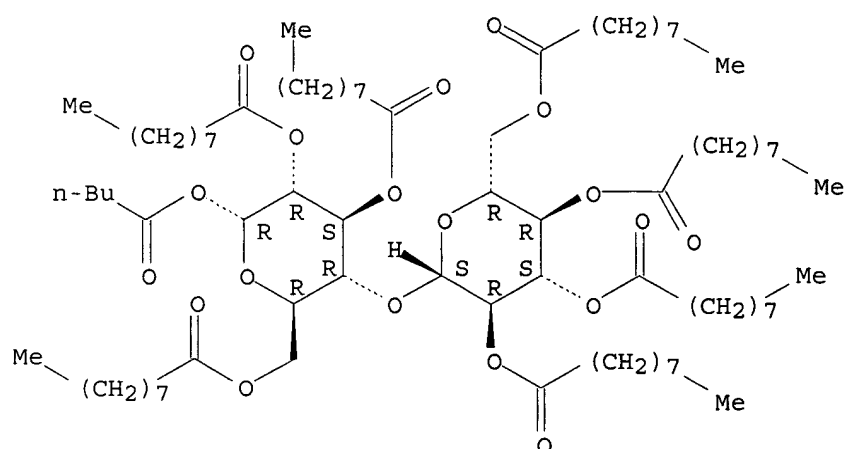
Absolute stereochemistry.



RN 415681-28-6 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-pentanoate (9CI) (CA INDEX NAME)

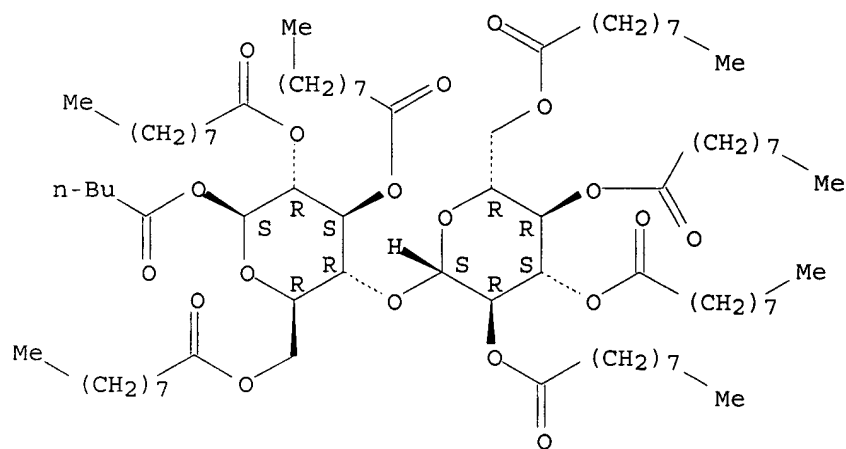
Absolute stereochemistry.



RN 415681-29-7 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-pentanoate (9CI) (CA INDEX NAME)

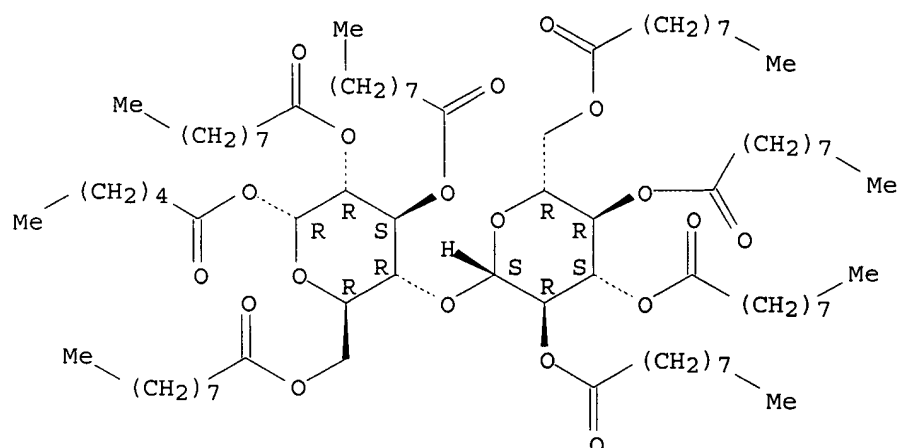
Absolute stereochemistry.



RN 415681-30-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

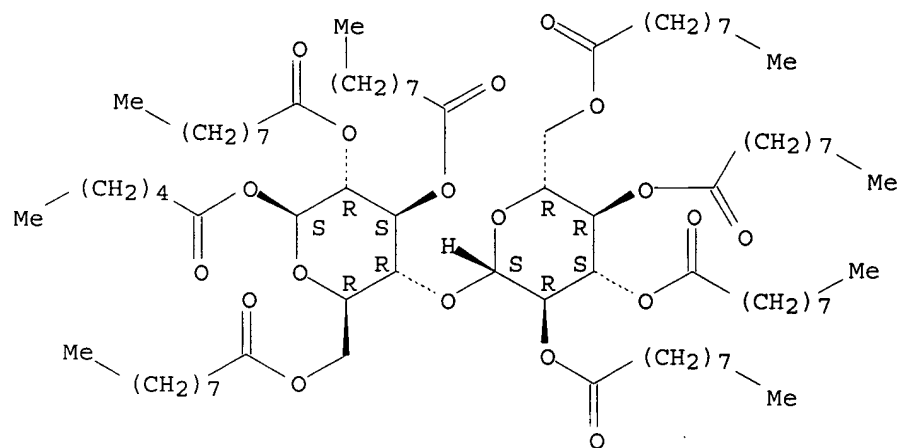
Absolute stereochemistry.



RN 415681-31-1 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

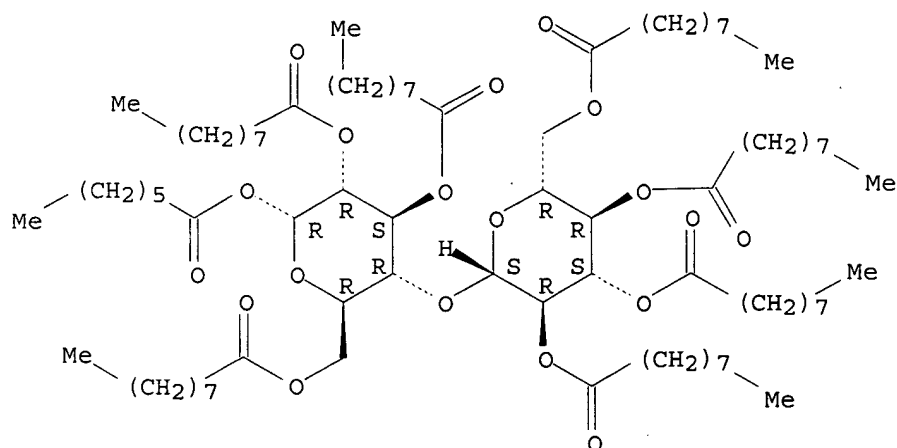
Absolute stereochemistry.



RN 415681-32-2 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-heptanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

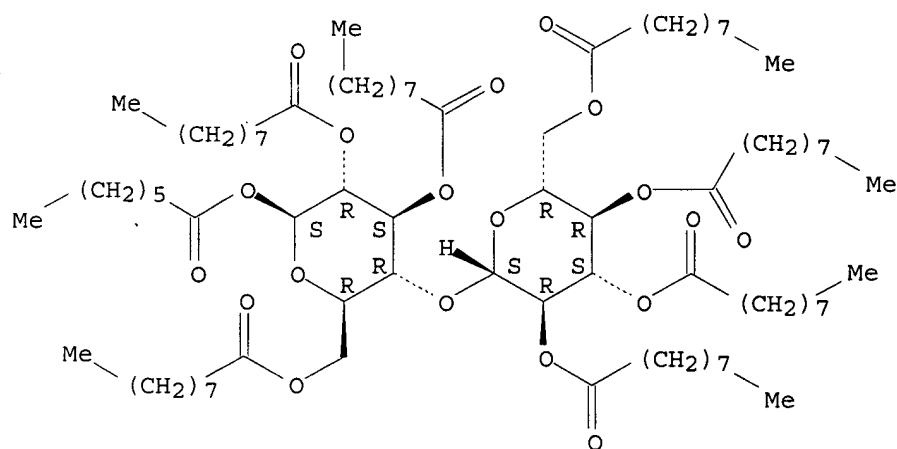
Absolute stereochemistry.



RN 415681-33-3 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-heptanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

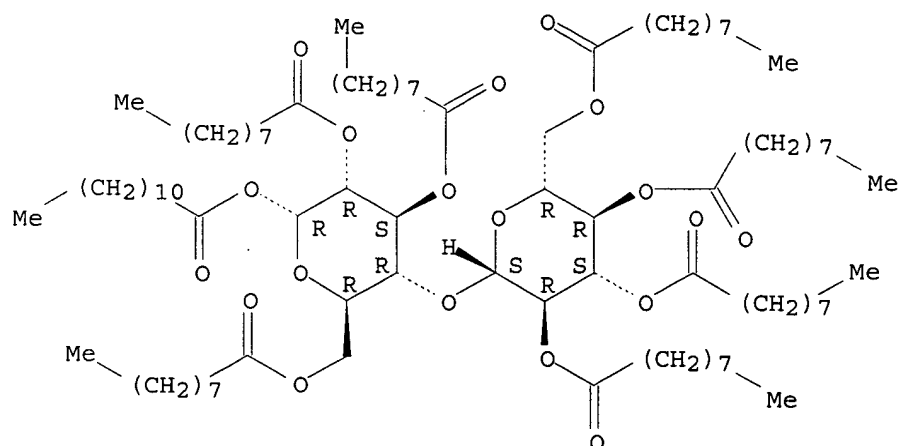
Absolute stereochemistry.



RN 415681-34-4 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-dodecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

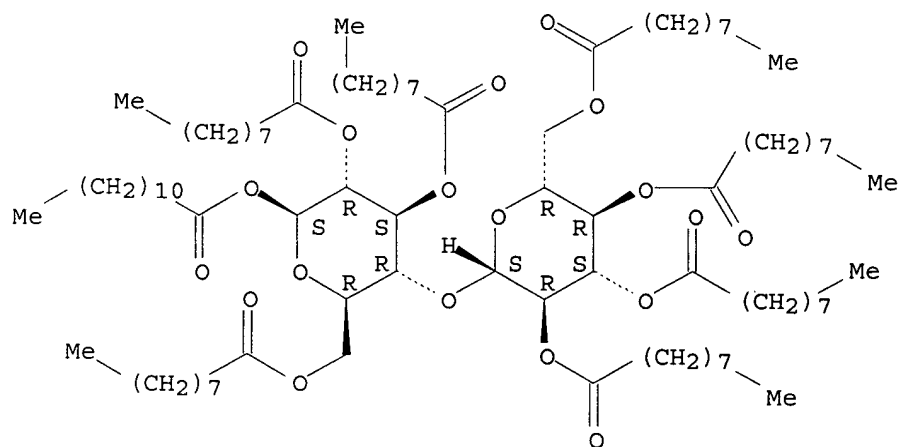
Absolute stereochemistry.



RN 415681-35-5 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-dodecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

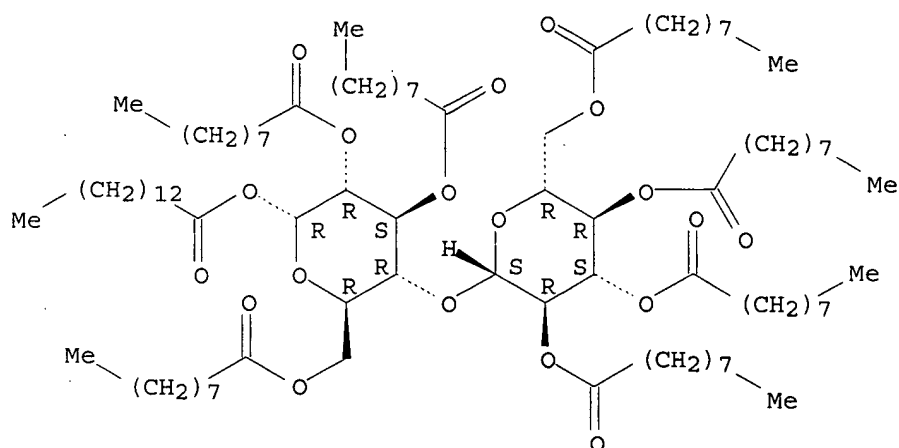
Absolute stereochemistry.



RN 415681-36-6 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-tetradecanoate (9CI) (CA INDEX NAME)

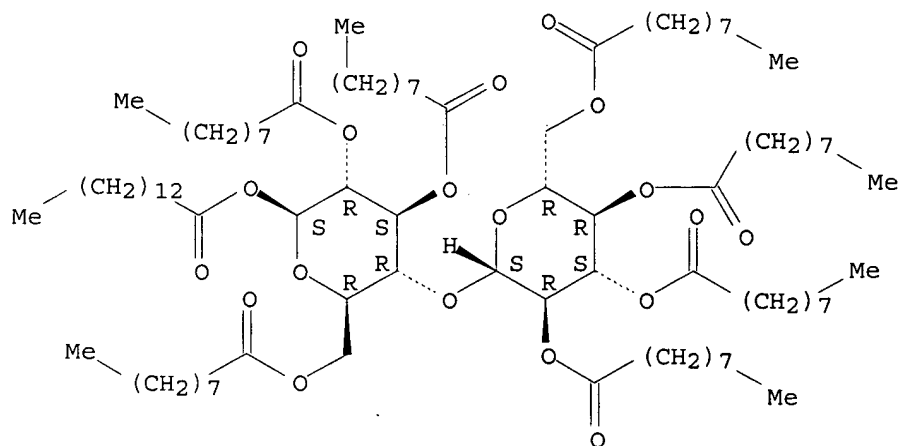
Absolute stereochemistry.



RN 415681-37-7 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-tetradecanoate (9CI) (CA INDEX NAME)

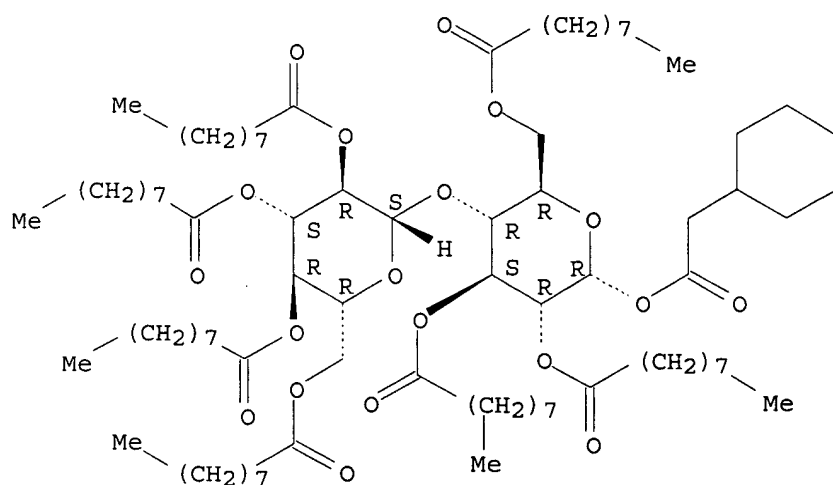
Absolute stereochemistry.



RN 415681-38-8 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexaneacetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

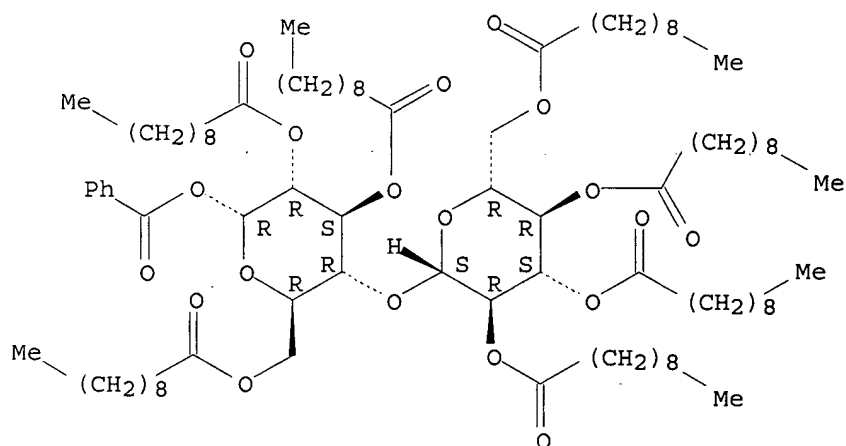
Absolute stereochemistry.



RN 415681-39-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

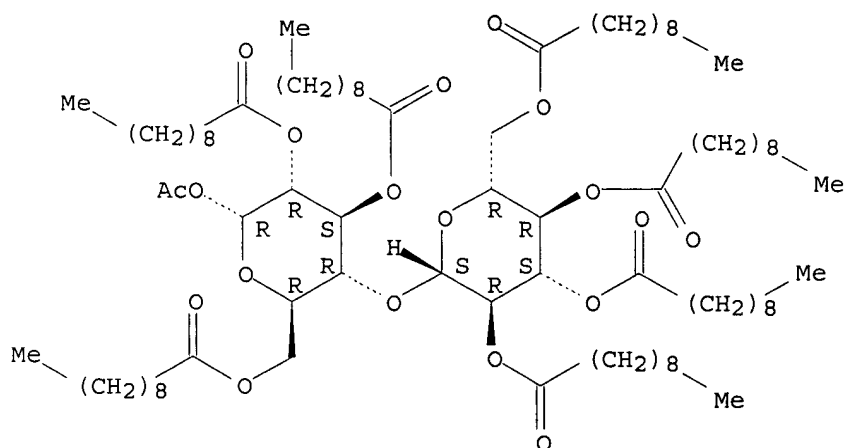
Absolute stereochemistry.



RN 415681-41-3 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

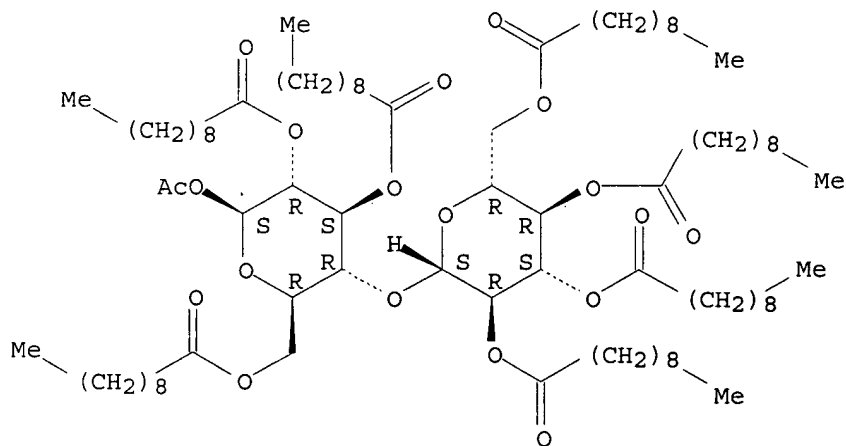
Absolute stereochemistry.



RN 415681-42-4 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

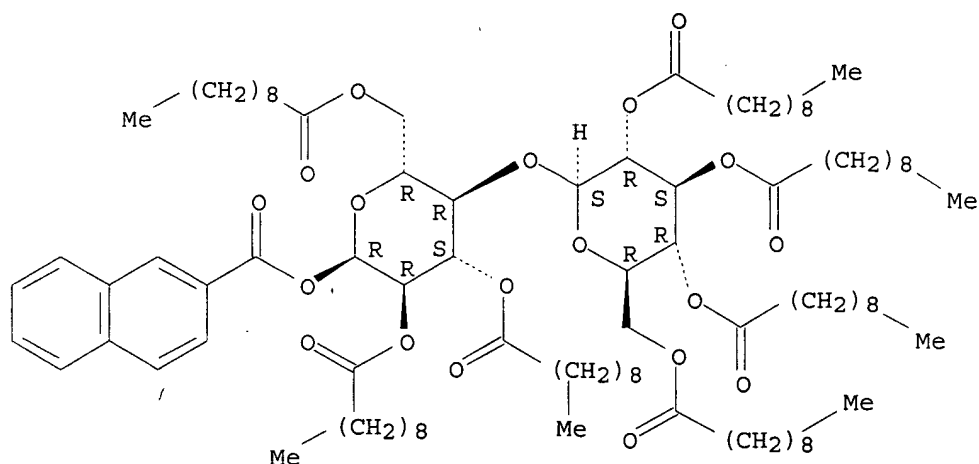
Absolute stereochemistry.



RN 415681-43-5 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-(2-naphthalenecarboxylate) (9CI) (CA INDEX NAME)

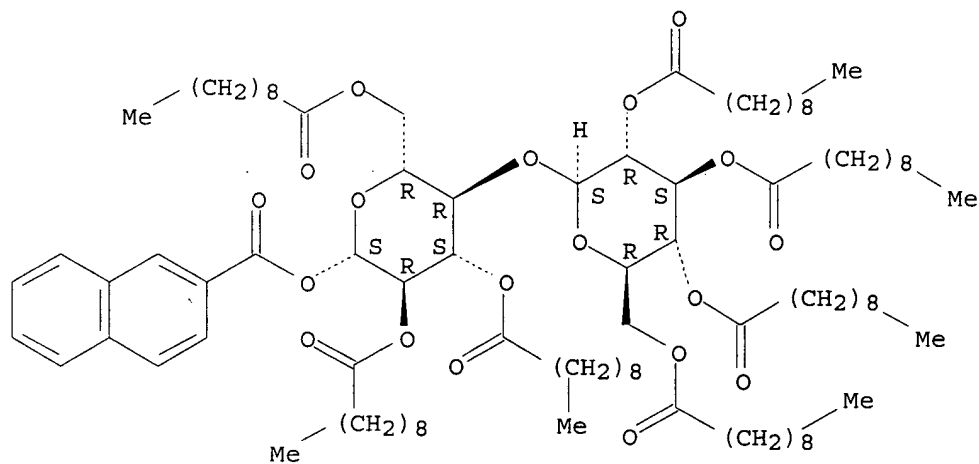
Absolute stereochemistry.



RN 415681-44-6 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-(2-naphthalenecarboxylate) (9CI)
(CA INDEX NAME)

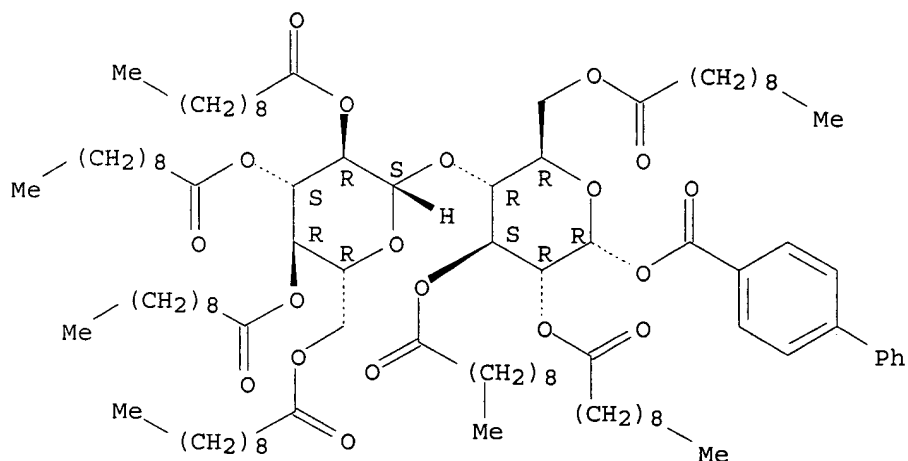
Absolute stereochemistry.



RN 415681-45-7 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

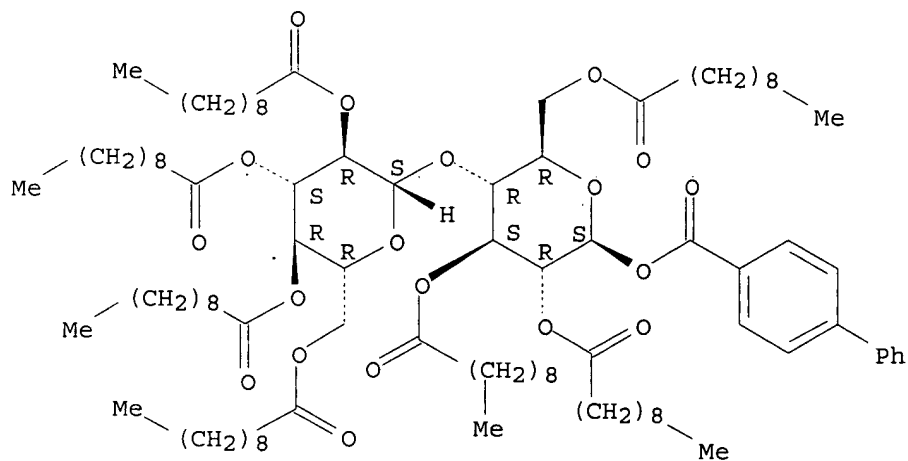
Absolute stereochemistry.



RN 415681-46-8 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

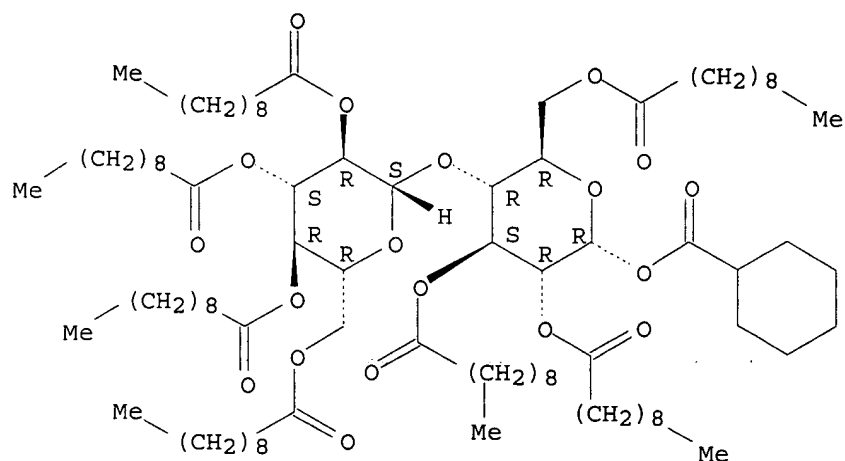
Absolute stereochemistry.



RN 415681-47-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

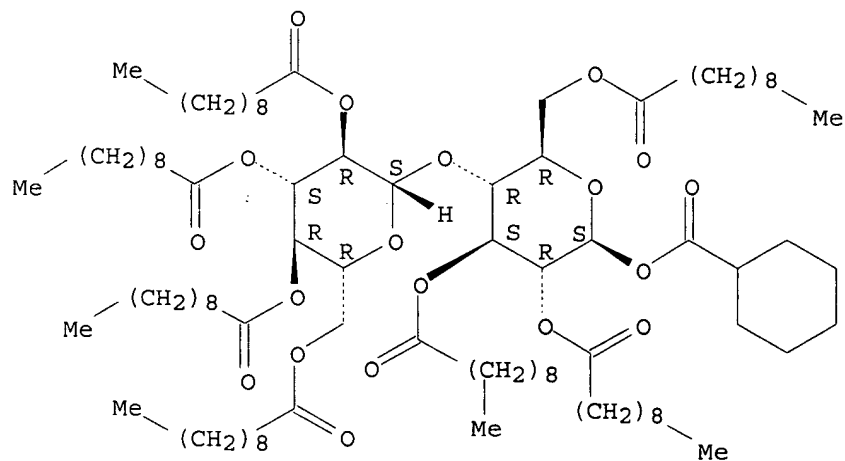
Absolute stereochemistry.



RN 415681-48-0 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-tris(decanoate) (9CI)
(CA INDEX NAME)

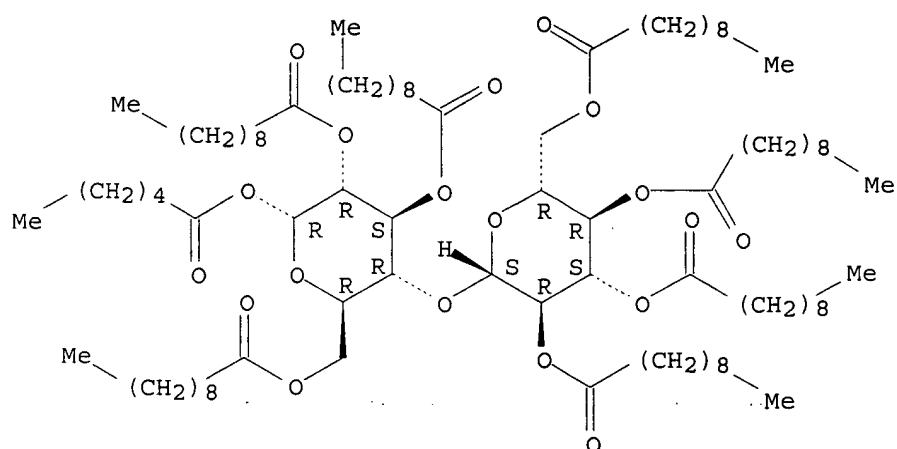
Absolute stereochemistry.



RN 415681-49-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexanoate (9CI) (CA INDEX NAME)

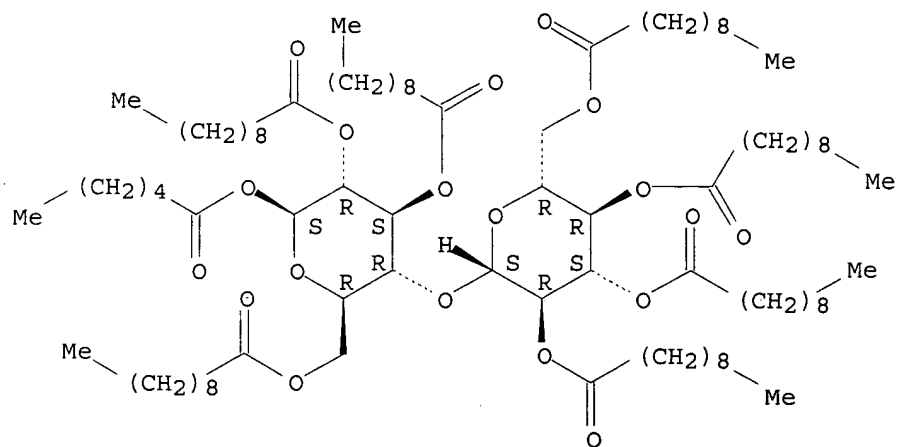
Absolute stereochemistry.



RN 415681-50-4 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexanoate (9CI) (CA INDEX NAME)

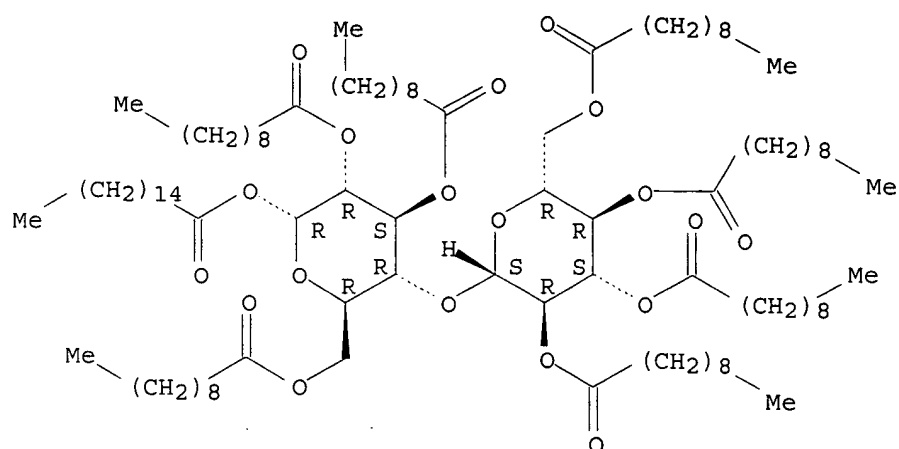
Absolute stereochemistry.



RN 415681-51-5 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexadecanoate (9CI) (CA INDEX NAME)

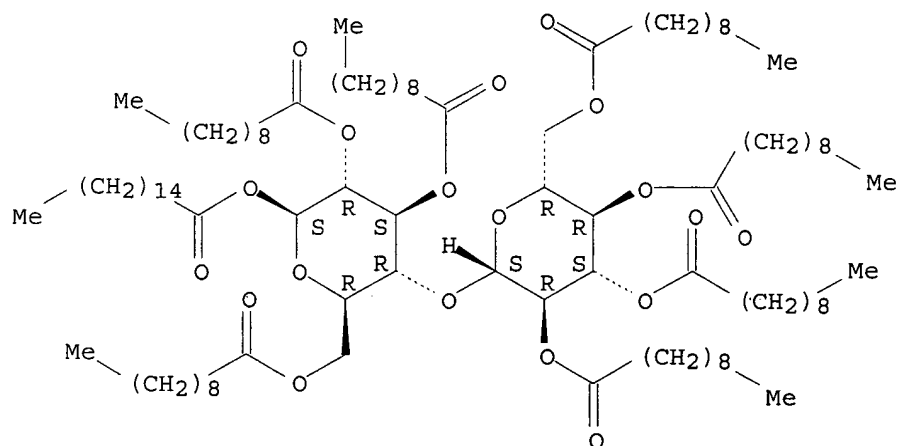
Absolute stereochemistry.



RN 415681-52-6 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexadecanoate (9CI) (CA INDEX NAME)

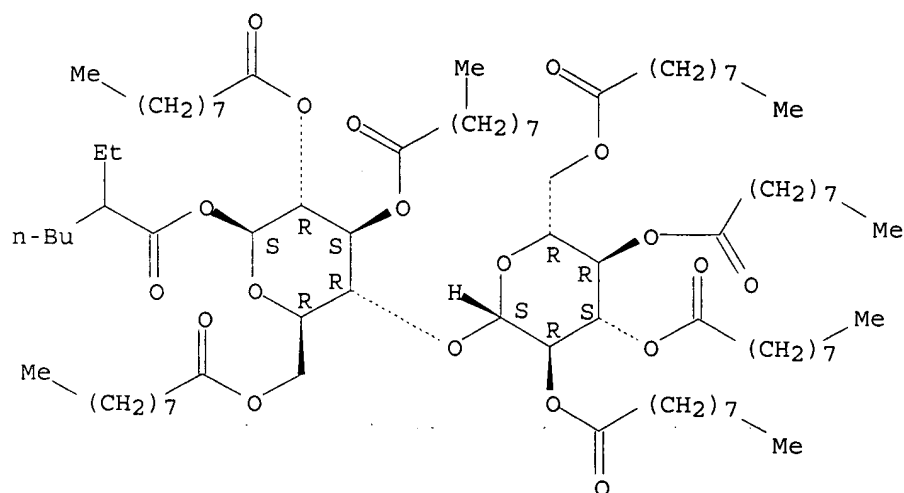
Absolute stereochemistry.



RN 415681-53-7 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-(2-ethylhexanoate) 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

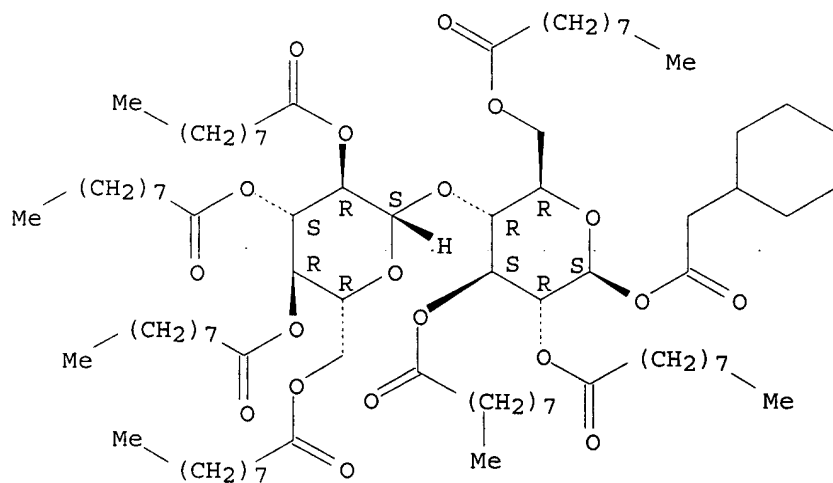
Absolute stereochemistry.



RN 415681-55-9 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexaneacetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

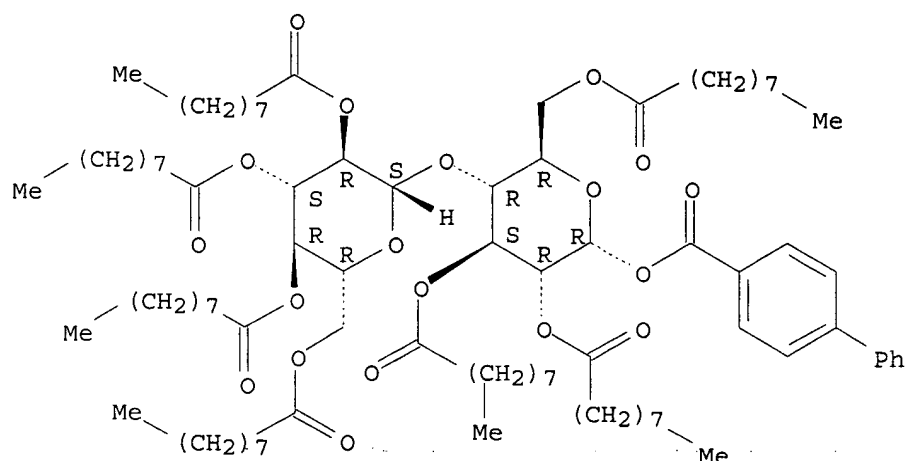
Absolute stereochemistry.



RN 415681-56-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

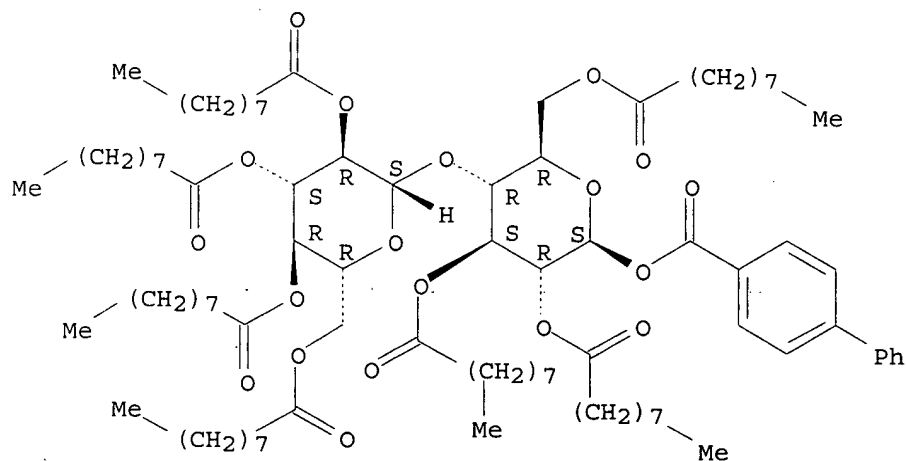
Absolute stereochemistry.



RN 415681-57-1 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-trinonanoate (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



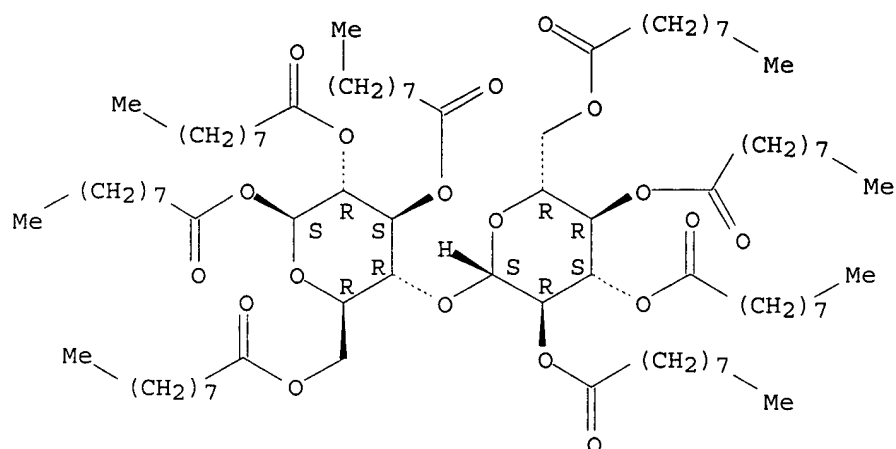
IT 139432-95-4P, .beta.-Cellobiose octanonoate 415681-40-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent).
(prepn. of cellobiose esters for use in cosmetics)

RN 139432-95-4 HCAPLUS

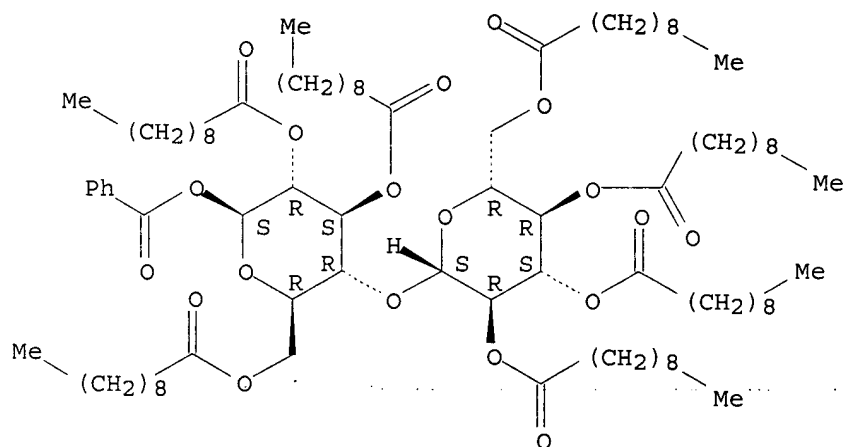
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 415681-40-2 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002:314436 HCAPLUS
 DOCUMENT NUMBER: 136:330337
 TITLE: Cosmetic compositions containing cellobiose octanonanoate
 INVENTOR(S): Grainger, Lynda; Gransden, Kathryn Elizabeth; Hopkinson, Andrew; Kowalski, Adam Jan; Webb, Nicholas; White, Michael Stephen
 PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV
 SOURCE: Eur. Pat. Appl., 20 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1199311	A1	20020424	EP 2001-307826	20010914
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002076385	A1	20020620	US 2001-978954	20011017
PRIORITY APPLN. INFO.:			GB 2000-25438	A 20001017

OTHER SOURCE(S): MARPAT 136:330337

AB Cellobiose esters and particularly .alpha.-cellobiose octanonanoate (I) has been found able to structure water-immiscible liqs. well, and in particular can produce clear structured emulsions. However, such emulsions tend to lose clarity or structural strength during storage. Deviating from I can result in impaired clarity and/or impaired hardness of emulsion sticks. However, acylated cellobiose which contains acyl substituents of formula -O-CO-R in which R represents an n-octyl residue and the percentage Y of the nonanoate acyl substituent -O-CO-R at the anomeric carbon is at least 60% and the percentage A of .alpha. anomer is greater than the .beta. anomer and not higher than $A = 74.5 + 0.2Y$ when Y is up to 92% and not higher than $A = 161 - 0.74Y$ when Y is greater than 92% offers the prodn. of sticks combining structurant stability with product clarity and hardness. A clear emulsion stick contained cyclomethicone DC245 17.6, polydecene 26.4, acylated cellobiose (A = 95.1%, and Y = 98.1%) 5.0, cetyl dimethicone copolyol 1.0, zirconal-50 40.0, and glycerol 10.0%.

IC ICM C07H003-04

ICS C07H013-06; A61K007-32; A61K007-34; A61K007-38

CC 62-6 (Essential Oils and Cosmetics)

IT 1327-41-9, Aluminum chlorohydrate 1344-20-3, Aluminum zirconium chlorohydrate 134910-86-4, Zirconal-50 172585-66-9, .alpha.-Cellobiose octanonanoate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic compns. contg. cellobiose octanonanoate)

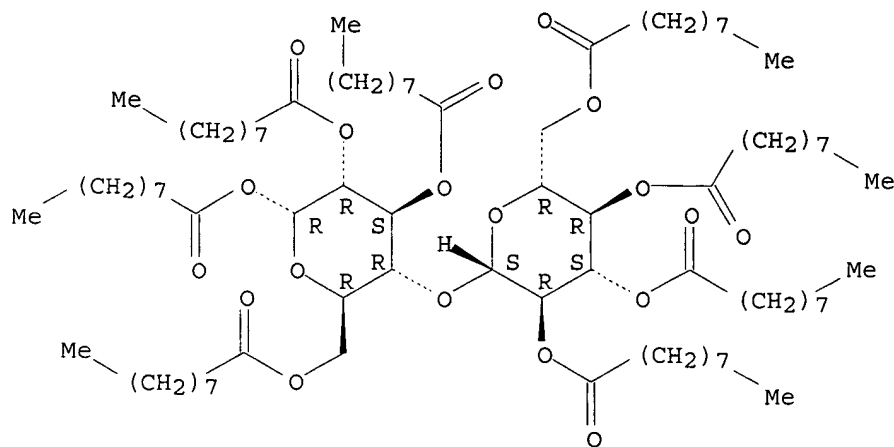
IT 172585-66-9, .alpha.-Cellobiose octanonanoate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic compns. contg. cellobiose octanonanoate)

RN 172585-66-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:171914 HCAPLUS

DOCUMENT NUMBER: 136:200415

TITLE: Methods of preparing disaccharide and trisaccharide C6-C12-fatty acid esters with high alpha content and materials therefrom

INVENTOR(S): Debenham, John S.; Buchanan, Charles M.; Wood, Matthew D.; Malcolm, Michael O.; Moore, Mary K.

PATENT ASSIGNEE(S): Eastman Chemical Company, USA

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018400	A2	20020307	WO 2001-US26446	20010824
WO 2002018400	A3	20020926		
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2002103369	A1	20020801	US 2001-933409	20010820
PRIORITY APPLN. INFO.:			US 2000-227990P	P 20000825
			US 2001-933409	A 20010820

OTHER SOURCE(S): CASREACT 136:200415

AB The present invention provides chem. processes for the prepn. of disaccharide and trisaccharide C6 to C12 fatty acid esters having a high alpha content. Yet still further, the invention provides materials prep'd. by the processes disclosed herein. Thus, esterification of cellobiose with nonanoic anhydride in the presence of methanesulfonic acid gave 95% yield of cellobiose octanonoate. HPLC anal. indicated that the alpha content of the product was 82%.

IC ICM C07G013-00

CC 33-4 (Carbohydrates)

Section cross-reference(s): 80

IT 3616-19-1P, Cellobiose octaacetate 139432-95-4P

172585-66-9P 401813-71-6P 401813-72-7P

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)

(methods of prepg. disaccharide and trisaccharide C6-C12-fatty acid esters via stereoselective esterification with high alpha content)

IT 139432-95-4P 172585-66-9P 401813-71-6P

401813-72-7P

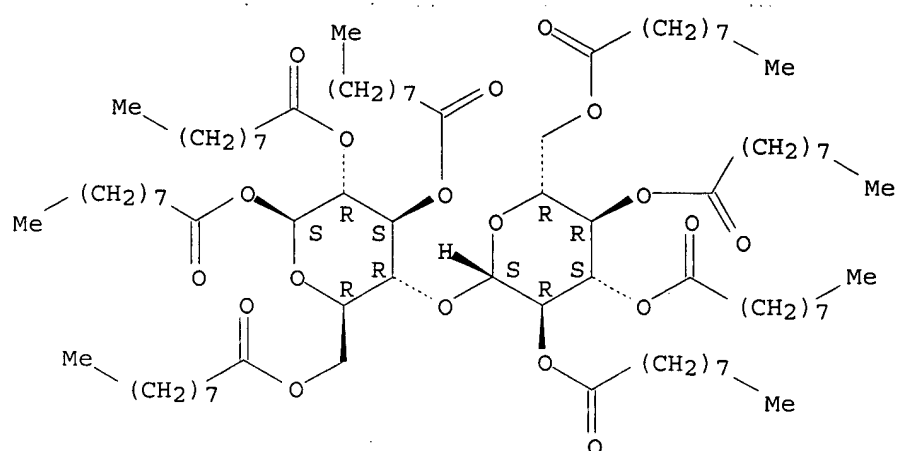
RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)

(methods of prepg. disaccharide and trisaccharide C6-C12-fatty acid esters via stereoselective esterification with high alpha content)

RN 139432-95-4 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

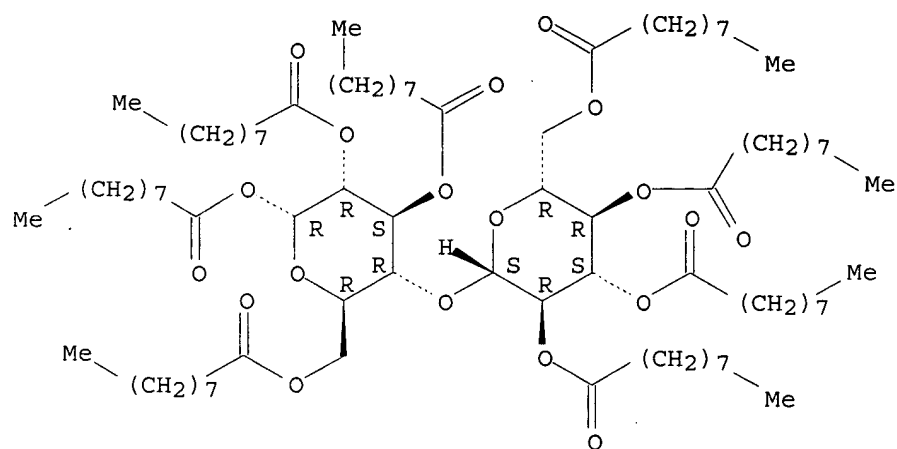
Absolute stereochemistry.



RN 172585-66-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

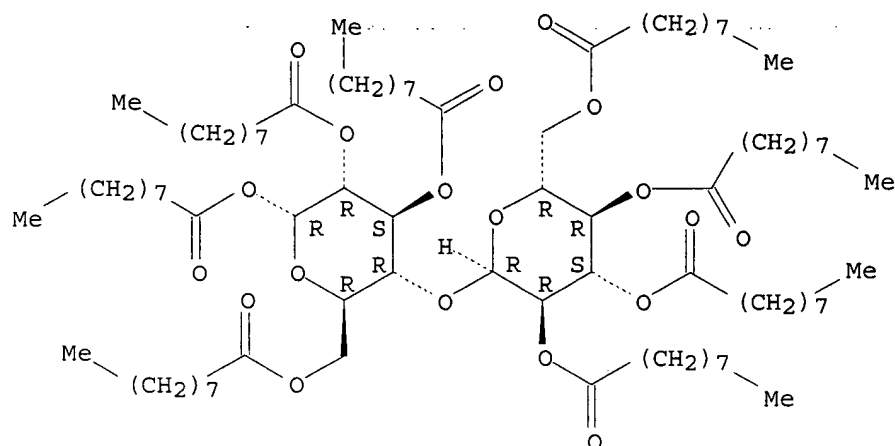
Absolute stereochemistry.



RN 401813-71-6 HCAPLUS

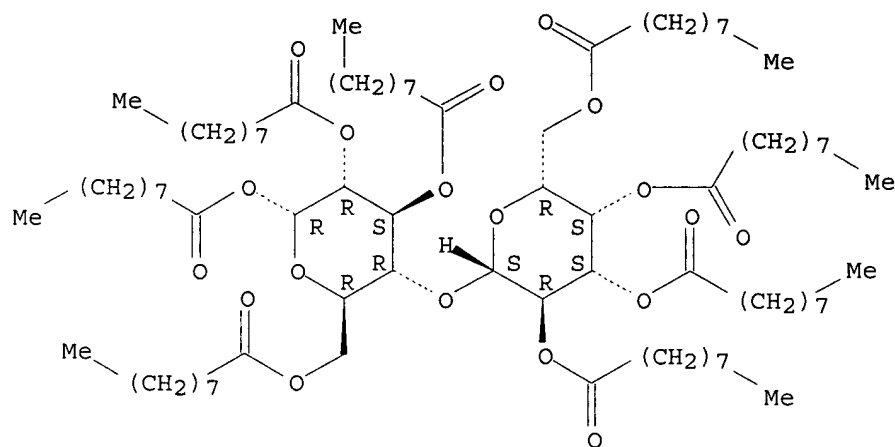
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.alpha.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 401813-72-7 HCAPLUS
 CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-galactopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2000:741875 HCAPLUS
 DOCUMENT NUMBER: 133:313389
 TITLE: Antiperspirant compositions
 INVENTOR(S): Esser, Isabelle Claire Helene Marie; Franklin, Kevin
 Ronald; Grainger, Lynda; Kowalski, Adam Jan; Rowe,
 Kathryn Elizabeth
 PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever Limited
 SOURCE: PCT Int. Appl., 95 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

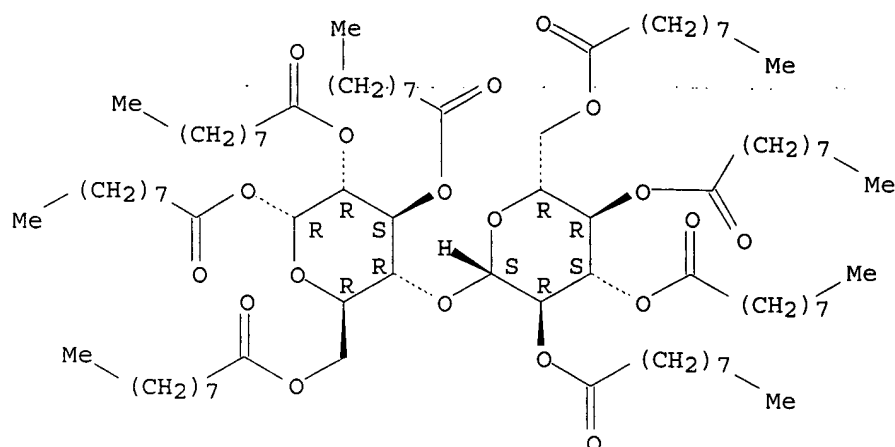
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000061094      A1      20001019      WO 2000-GB1230      20000331
W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
    CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
    IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
    MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
    SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
    BY, KG, KZ, MD, RU, TJ, TM
RW:  GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
    DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
    CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
BR 2000009697      A      20020102      BR 2000-9697      20000331
EP 1169014      A1      20020109      EP 2000-920859      20000331
R:   AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
    IE, SI, LT, LV, FI, RO
US 6241976      B1      20010605      US 2000-547445      20000412
PRIORITY APPLN. INFO.:      GB 1999-8223      A      19990412
                                WO 2000-GB1230      W      20000331
AB   An antiperspirant compn. is a structured emulsion of a continuous phase
contg. water-immiscible liq. carrier plus a structurant, and a disperse
phase which is a soln. of antiperspirant active in water or a mixt. of
water and water-sol. solvent. The structurant is a fully or partially
esterified saccharide. The compns. give low visible residue when applied
to skin or to clothing. A compn. was prepd. contg. Cyclomethicone DC 245
18, Polydecene 22.75, Finsolv TN 13.3, isostearyl alc. 12,
N-lauryl-L-glutamic acid dibutylamide 4, Cetyl Dimethicone Copolyol 1, and
Zirconal 50 40 parts by wt.
IC   ICM A61K007-32
CC   62-4 (Essential Oils and Cosmetics)
IT   145686-34-6P, Cetyl dimethicone copolyol 172585-66-9P,
    .alpha.-Cellobiose octanonanoate 172585-67-0P,
    .alpha.-Cellobiose octadecanoate
RL:  BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
    (Biological study); PREP (Preparation); USES (Uses)
    (antiperspirant compns. contg. esterified saccharide structurants)
IT   172585-66-9P, .alpha.-Cellobiose octanonanoate
    172585-67-0P, .alpha.-Cellobiose octadecanoate
RL:  BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
    (Biological study); PREP (Preparation); USES (Uses)
    (antiperspirant compns. contg. esterified saccharide structurants)
RN   172585-66-9 HCAPLUS
CN   .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-
    glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

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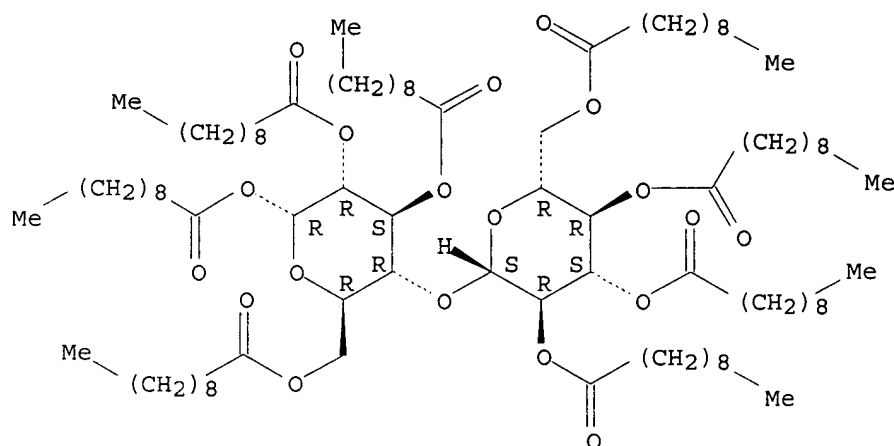
Absolute stereochemistry.



RN 172585-67-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:741865 HCAPLUS

DOCUMENT NUMBER: 133:313387

TITLE: Cosmetic structured emulsion compositions

INVENTOR(S): Franklin, Kevin Ronald; Hopkinson, Andrew

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N.V.; Hindustan Lever Limited

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

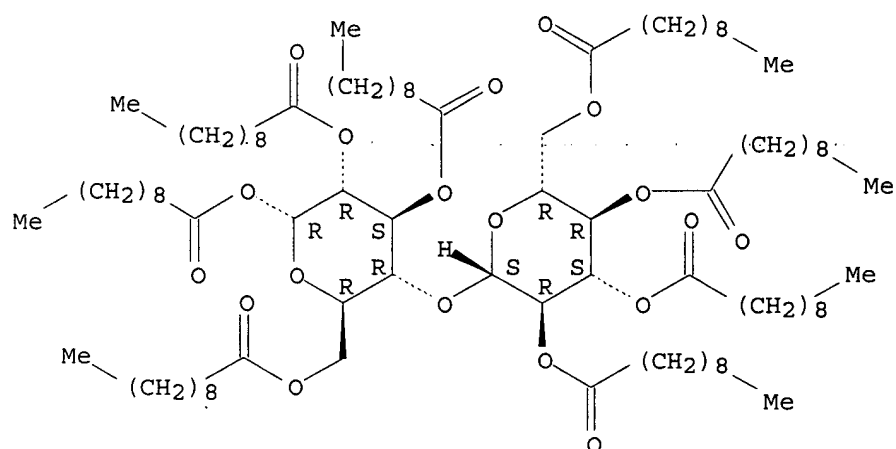
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061081	A2	20001019	WO 2000-GB1236	20000331
WO 2000061081	A3	20020110		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1187597	A2	20020320	EP 2000-918999	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009748	A	20020416	BR 2000-9748	20000331
US 6455056	B1	20020924	US 2000-547804	20000411
US 2001055574	A1	20011227	US 2000-548309	20000412
US 6426060	B2	20020730		
PRIORITY APPLN. INFO.:				
			GB 1999-8212	A 19990412
			WO 2000-GB1236	W 20000331
AB	A cosmetic compn. is a structured emulsion of a continuous phase contg. water-immiscible liq. carrier plus a structurant, and a disperse phase which is a soln. of antiperspirant active in a more polar, probably aq., solvent. The structurant is a material which forms a network of fibers in the continuous phase, thereby gelling it. The structurant has an enthalpy of gelation in the carrier liq. or a test liq. with a magnitude of at least 30 kJ/mol. This min. enthalpy of gelation facilitates processing at conveniently accessible temps. and promotes stability. The enthalpy of gelation was detd. for a no. of structureing agents such as .alpha.-cellobiose esters in 3 liqs. Antiperspirant compns. were given.			
IC	ICM A61K007-00			
CC	62-4 (Essential Oils and Cosmetics)			
IT	172585-67-0, .alpha.-Cellobiose octadecanoate 172585-68-1 , .alpha.-Cellobiose octaundecanoate 301684-31-1 301684-34-4 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (cosmetic structured emulsion compns.)			
IT	79-63-0P, Lanosterol 83-46-5P, .beta.-Sitosterol 106-14-9P, 12-Hydroxystearic acid 12738-23-7P, Oryzanol 63663-21-8P, GP-1 172585-65-8P, .alpha.-Cellobiose octaoctanoate 172585-66-9P, .alpha.-Cellobiose octanonanoate RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (cosmetic structured emulsion compns.)			
IT	172585-67-0, .alpha.-Cellobiose octadecanoate 172585-68-1 , .alpha.-Cellobiose octaundecanoate 301684-31-1 301684-34-4 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (cosmetic structured emulsion compns.)			
RN	172585-67-0 HCAPLUS			
CN	.alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)			

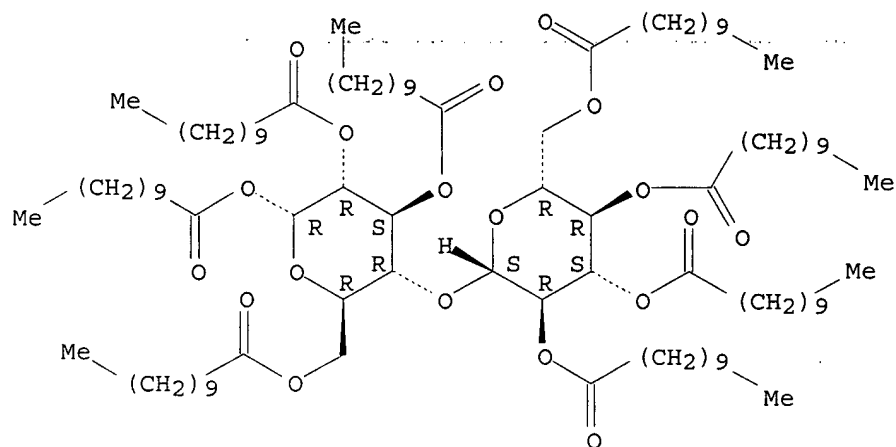
Absolute stereochemistry.



RN 172585-68-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

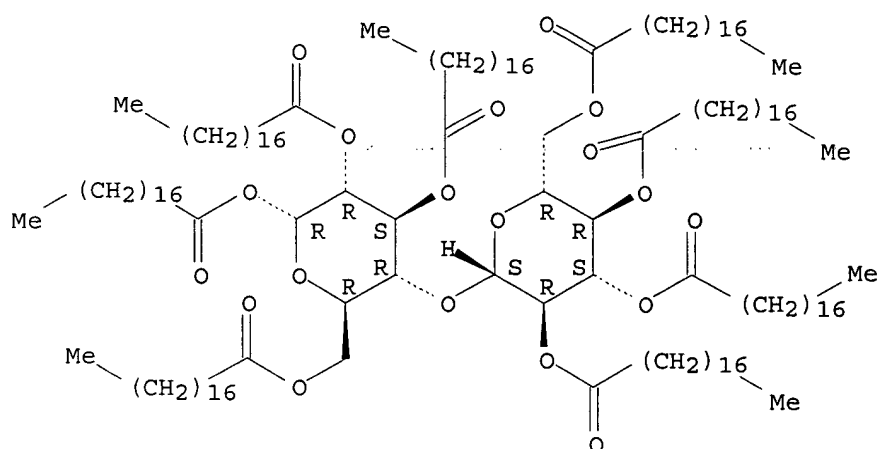
Absolute stereochemistry.



RN 301684-31-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

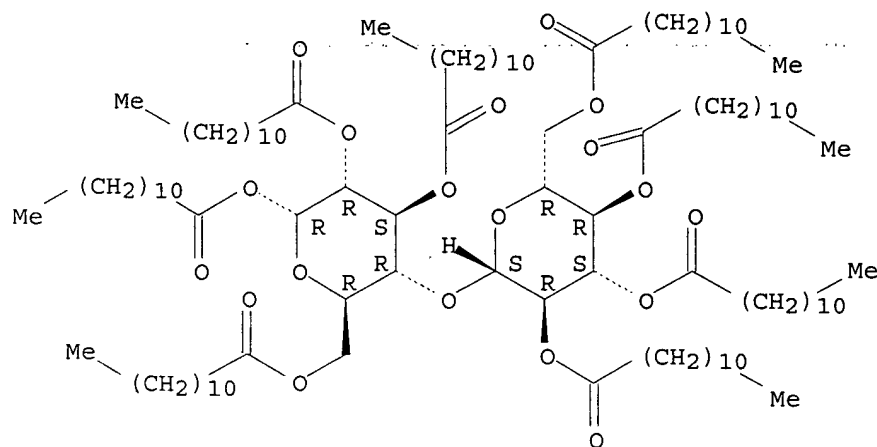
Absolute stereochemistry.



RN 301684-34-4 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecannaote (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 172585-65-8P, .alpha.-Cellobiose octaoctanoate

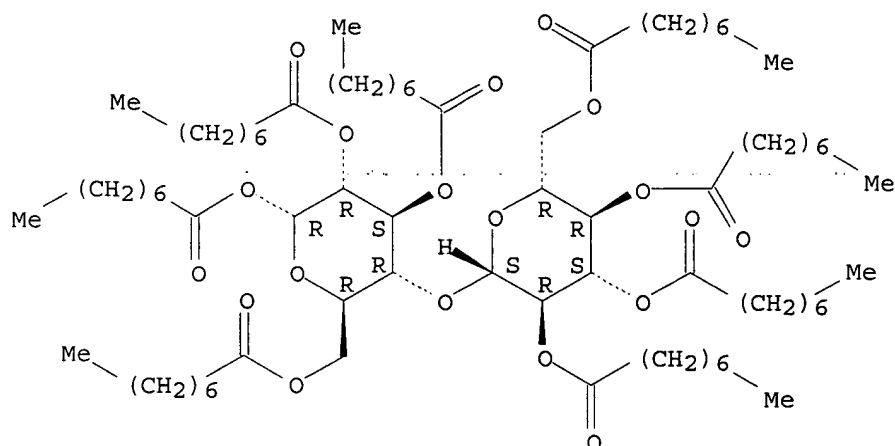
172585-66-9P, .alpha.-Cellobiose octanonanoate

RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (cosmetic structured emulsion comps.)

RN 172585-65-8 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

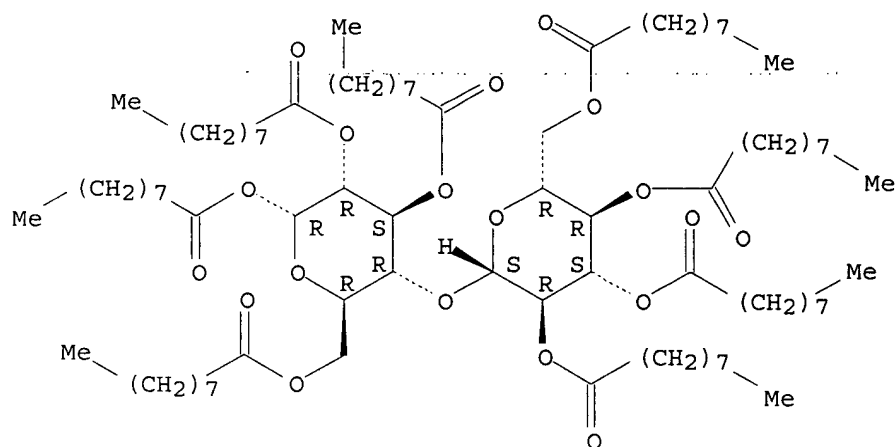
Absolute stereochemistry.



RN 172585-66-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:741864 HCAPLUS

DOCUMENT NUMBER: 133:313386

TITLE: Cosmetic compositions containing saccharide ester structurants

INVENTOR(S): Franklin, Kevin Ronald; Hopkinson, Andrew

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever Limited

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000061080 A2 20001019 WO 2000-GB1235 20000331
 WO 2000061080 A3 20010503
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
 CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
 MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
 SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1175199 A2 20020130 EP 2000-918998 20000331
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 US 6455056 B1 20020924 US 2000-547804 20000411
 US 2001055574 A1 20011227 US 2000-548309 20000412
 US 6426060 B2 20020730

PRIORITY APPLN. INFO.:

GB 1999-8212 A 19990412
 WO 2000-GB1235 W 20000331

AB A cosmetic compn. contains a water-immiscible carrier liq. and a structurant therefor which is effective to gel the compn. upon cooling from a temp. at which the structurant is a mobile soln. in the carrier liq. The carrier liq. may serve as a continuous phase in which a solid or liq. disperse phase is suspended. The structurant is a fully or partially esterified saccharide which contains no more than eight monosaccharide residues and has an enthalpy of gelation in the carrier liq. with a magnitude of at least 45 kJ/mol. This min. enthalpy of gelation facilitates processing at conveniently accessible temps. and promotes stability. The enthalpy of gelation for a no. of .alpha.-cellobiose esters was given and cosmetic gel formulations given.

IC ICM A61K007-00

CC 62-4 (Essential Oils and Cosmetics)

IT 79-63-0, Lanosterol 83-46-5, .beta.-Sitosterol 106-14-9,
 12-Hydroxystearic acid 12738-23-7, Oryzanol 63663-21-8
 172585-65-8, .alpha.-Cellobiose octa-octanoate 172585-67-0
 172585-68-1, .alpha.-Cellobiose octaundecanoate
 301684-31-1 301684-34-4

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(cosmetic compns. contg. saccharide ester structurants)

IT 172585-66-9P, .alpha.-Cellobiose octanonoate

RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cosmetic compns. contg. saccharide ester structurants)

IT 172585-65-8, .alpha.-Cellobiose octa-octanoate 172585-67-0

172585-68-1, .alpha.-Cellobiose octaundecanoate

301684-31-1 301684-34-4

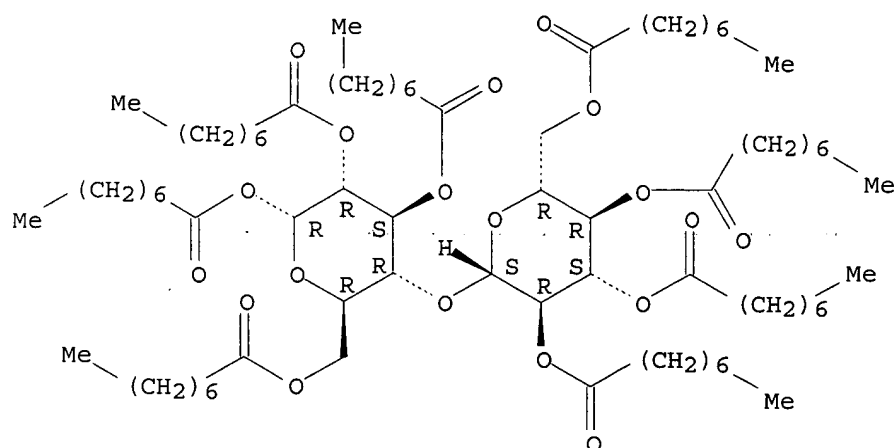
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(cosmetic compns. contg. saccharide ester structurants)

RN 172585-65-8 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

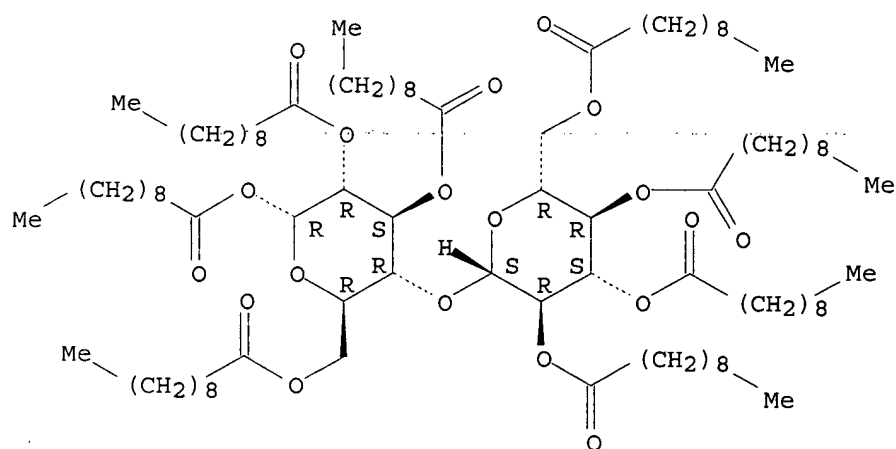
Absolute stereochemistry.



RN 172585-67-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

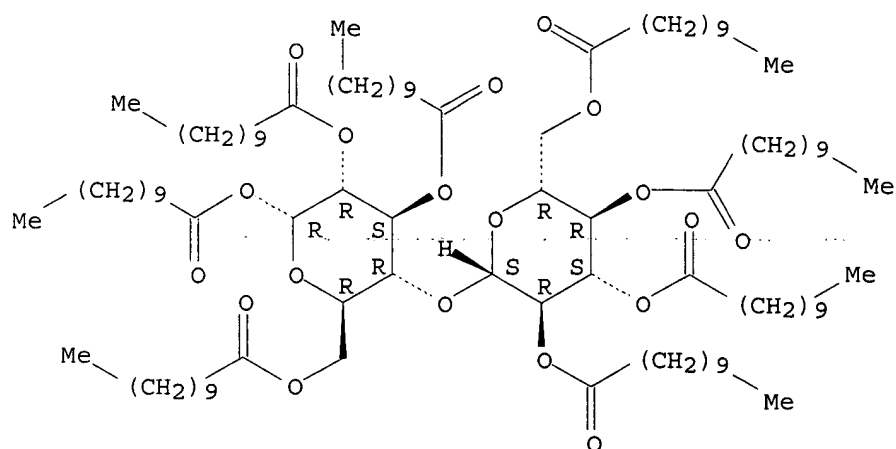
Absolute stereochemistry.



RN 172585-68-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

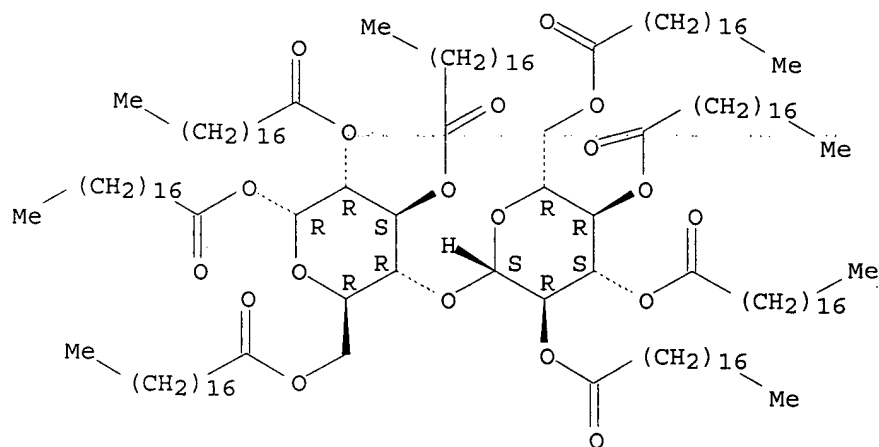
Absolute stereochemistry.



RN 301684-31-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

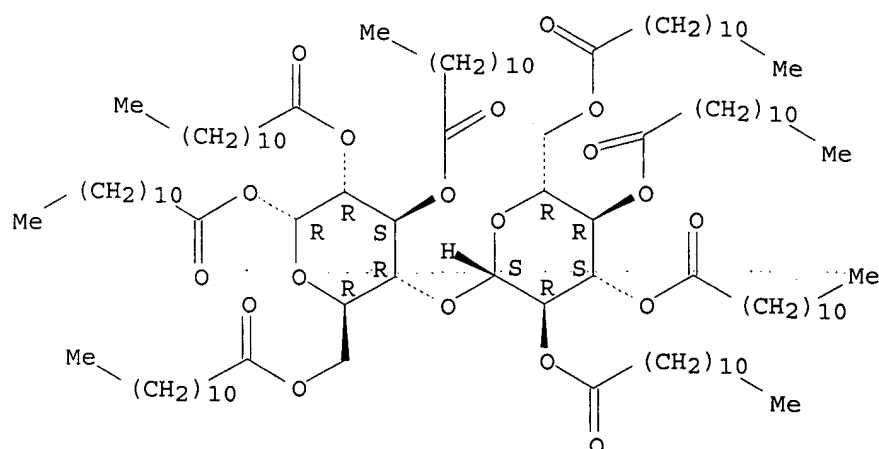
Absolute stereochemistry.



RN 301684-34-4 HCAPLUS

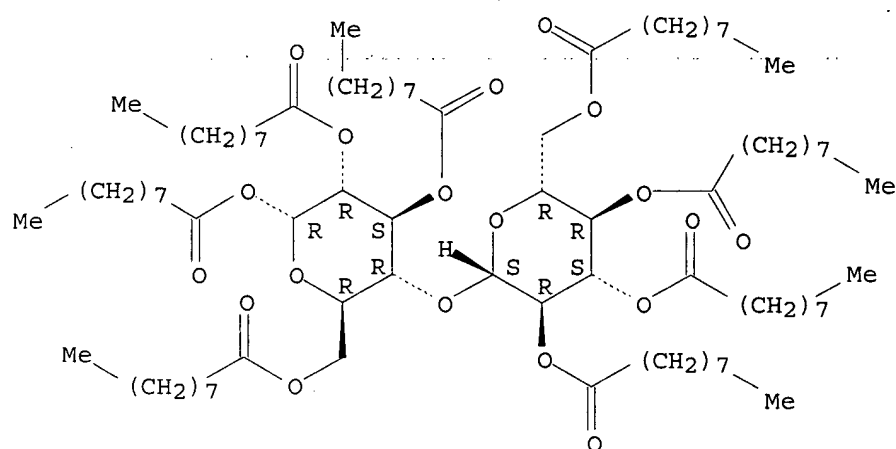
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecannaote (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 172585-66-9P, .alpha.-Cellobiose octanonanoate
 RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (cosmetic compns. contg. saccharide ester structurants)
 RN 172585-66-9 HCAPLUS
 CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2000:741863 HCAPLUS
 DOCUMENT NUMBER: 133:313385
 TITLE: Cosmetic compositions containing cellobiose ester structurants
 INVENTOR(S): Franklin, Kevin Ronald; Kowalski, Adam Jan; Parrot, David Terence; Rowe, Kathryn Elizabeth; White, Michael Stephen
 PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N.V.; Hindustan Lever Limited
 SOURCE: PCT Int. Appl., 95 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061079	A2	20001019	WO 2000-GB1228	20000331
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000009698	A	20020102	BR 2000-9698	20000331
EP 1171086	A2	20020116	EP 2000-918996	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6248312	B1	20010619	US 2000-548310	20000412
US 2001033851	A1	20011025	US 2001-826494	20010404
US 6458344	B2	20021001		

PRIORITY APPLN. INFO.: GB 1999-8202 A 19990412
 WO 2000-GB1228 W 20000331
 US 2000-548310 A3 20000412

OTHER SOURCE(S): MARPAT 133:313385

AB A cosmetic compn. preferably an antiperspirant compn., in solid or soft-solid form has a continuous phase which contains a water-immiscible liq. carrier and also contains a structurant which is partially or fully esterified cellobiose. A no. of cellobiose esters were prepd. including the nonanoate and decanoate and a no. of cosmetic formulations given including antiperspirants.

IC ICM A61K007-00

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 33

IT 172585-65-8P, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate 172585-66-9P, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate 172585-67-0P
 172585-68-1P, .alpha.-Cellobiose octaundecanoate
 301684-31-1P 301684-34-4P 301807-45-4P
 301807-46-5P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (cosmetic compns. contg. cellobiose ester structurants)

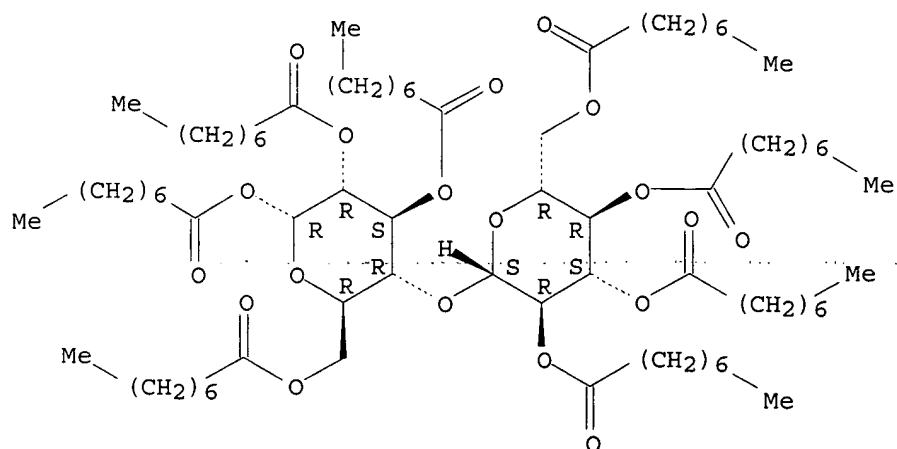
IT 172585-65-8P, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate 172585-66-9P, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate 172585-67-0P
 172585-68-1P, .alpha.-Cellobiose octaundecanoate
 301684-31-1P 301684-34-4P 301807-45-4P
 301807-46-5P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (cosmetic compns. contg. cellobiose ester structurants)

RN 172585-65-8 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

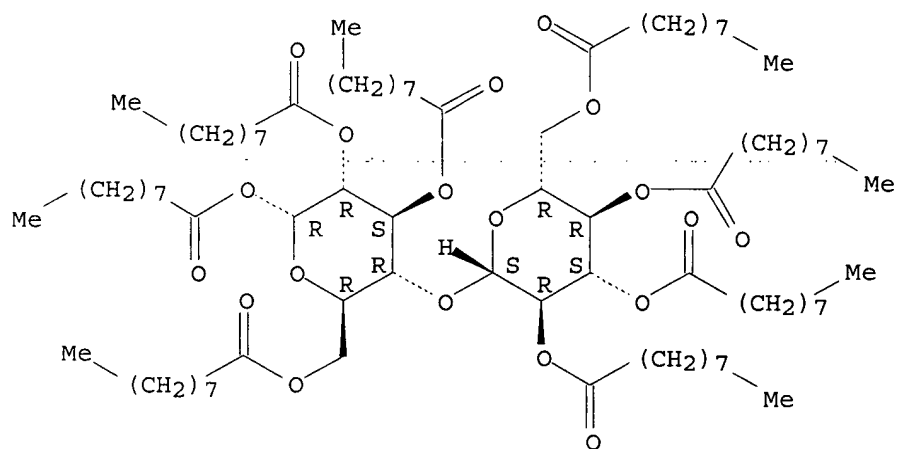
Absolute stereochemistry.



RN 172585-66-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

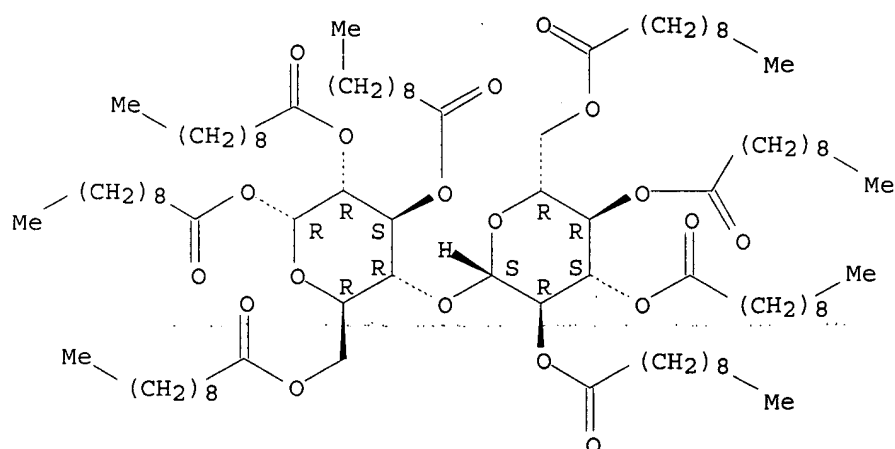
Absolute stereochemistry.



RN 172585-67-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

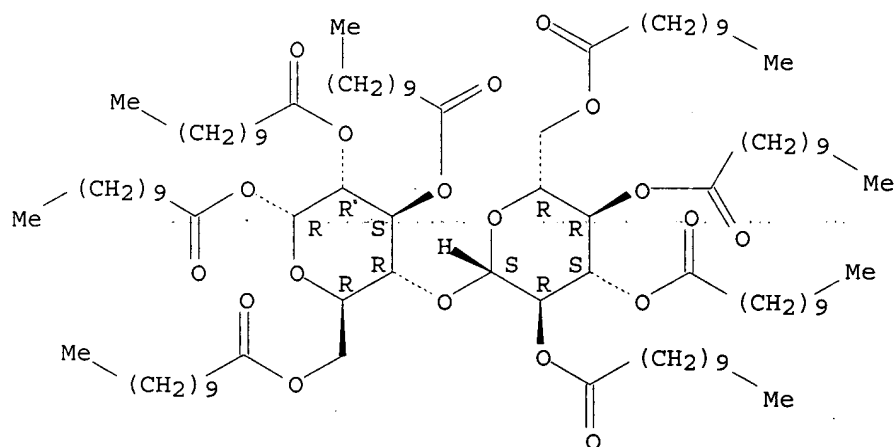
Absolute stereochemistry.



RN 172585-68-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

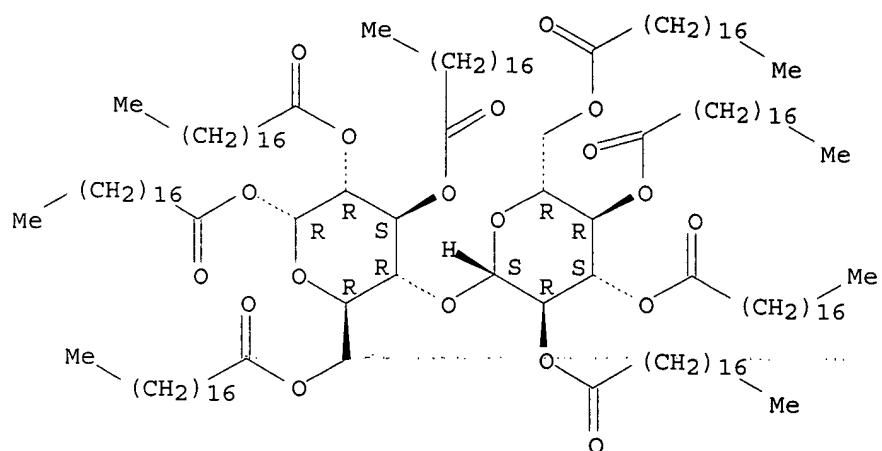
Absolute stereochemistry.



RN 301684-31-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

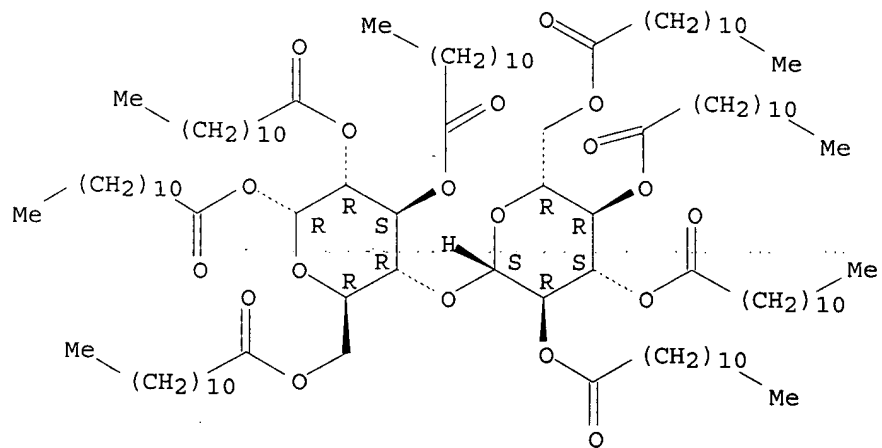
Absolute stereochemistry.



RN 301684-34-4 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecannaote (9CI) (CA INDEX NAME)

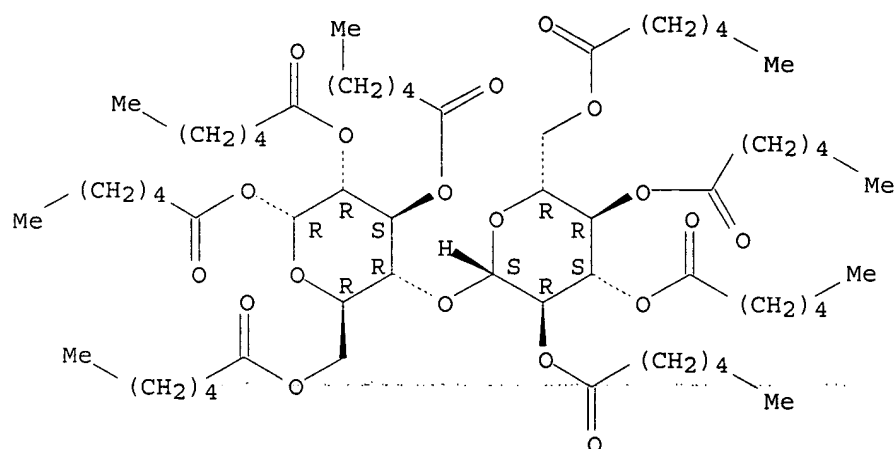
Absolute stereochemistry.



RN 301807-45-4 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxohexyl)-.beta.-D-glucopyranosyl]-, tetrahexanoate (9CI) (CA INDEX NAME)

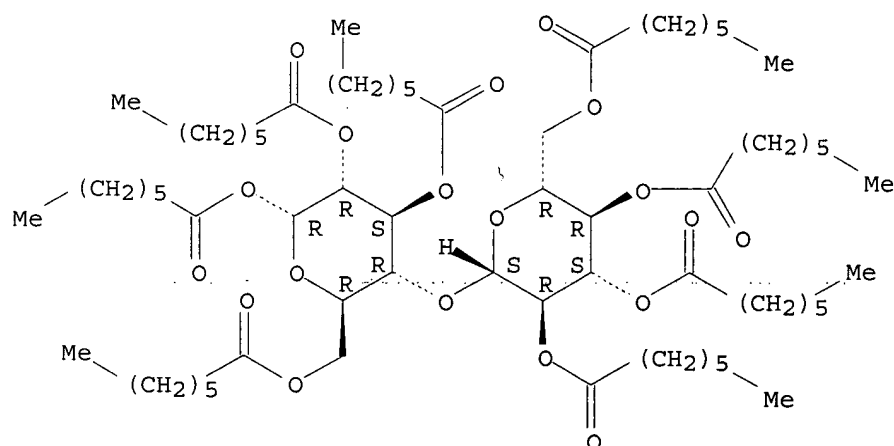
Absolute stereochemistry.



RN 301807-46-5 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoheptyl)-.beta.-D-glucopyranosyl]-, tetraheptanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:468460 HCAPLUS

DOCUMENT NUMBER: 131:92545

TITLE: Carbohydrates, useful in solid delivery systems

INVENTOR(S): Blair, Julian Alexander

PATENT ASSIGNEE(S): Quadrant Holdings Cambridge Limited, UK

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9933853	A2	19990708	WO 1998-GB3888	19981223

WO 9933853 A3 19990930

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6352722 B1 20020305 US 1998-218845 19981222

ZA 9811843 A 19990624 ZA 1998-11843 19981223

CA 2316275 AA 19990708 CA 1998-2316275 19981223

AU 9920629 A1 19990719 AU 1999-20629 19981223

EP 1042339 A2 20001011 EP 1998-965297 19981223

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2001527087 T2 20011225 JP 2000-526529 19981223

US 2002058067 A1 20020516 US 2001-4481 20011101

PRIORITY APPLN. INFO.:

US 1997-68754P P 19971223

US 1998-218845 A1 19981222

WO 1998-GB3888 W 19981223

OTHER SOURCE(S): MARPAT 131:92545

AB Derivatized carbohydrates are provided which can be used to form a variety of materials including solid delivery systems. The derivatized carbohydrates are generally carbohydrates, wherein at least a portion of the hydroxyl groups on the carbohydrate are substituted with a branched hydrophobic chain, such as a hydrocarbon chain, via, for example, an ether or ester linkage. The solid delivery systems can be used for delivery and release of a variety of substances, and are, e.g., in the form of tablets or powders for oral administration, microspheres or implants for i.v., intradermal, transdermal, pulmonary or other routes of administration. The derivatized carbohydrates may be processed to form a solid matrix having a substance, such as a therapeutic agent, incorporated therein. The solid matrix is provided in a solid dose form which is capable of releasing a therapeutic substance in situ at various controlled rates. Thus, a model drug diltiazem-HCl was incorporated into solid vehicles of the straight-chain trehalose octaacetate or the branched-chain trehalose octa-3,3-dimethylbutyrate and trehalose octapivalate as well as composite formulations of the 2 carbohydrates. The drug release was much slower from the branched-chain carbohydrate formulation than from the straight-chain formulation.

IC ICM C07H015-12

ICS C07H003-04

CC 63-6 (Pharmaceuticals)

IT 5346-90-7, .alpha.-Cellobiose octaacetate 6291-42-5, .beta.-Lactose

octaacetate 20764-63-0, .beta.-Cellobiose octaacetate 30021-60-4

34213-32-6, .alpha.-Lactose octaacetate 52554-32-2 107243-31-2

118649-02-8 129728-03-6 177327-93-4, Trehalose octapropionate

177472-68-3 190323-37-6 210051-48-2 210100-67-7 229962-35-0

229962-37-2 229962-38-3 229962-40-7 229962-42-9

229962-44-1 229962-45-2 229962-46-3 229962-48-5 229962-49-6

229962-50-9 229962-51-0 229962-52-1 229962-55-4 229966-88-5

229966-90-9 229966-91-0 229966-92-1 229966-93-2 229966-94-3

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(carbohydrates in solid delivery systems)

IT 229962-37-2

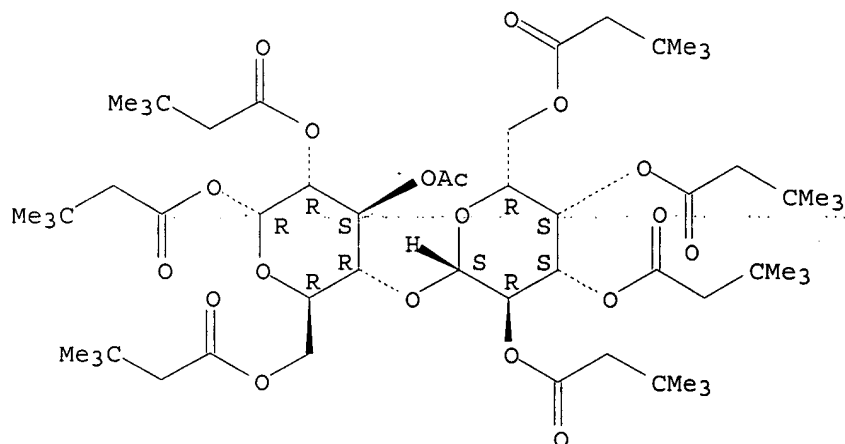
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(carbohydrates in solid delivery systems)

RN 229962-37-2 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(3,3-dimethyl-1-oxobutyl)-
 .beta.-D-galactopyranosyl]-, 3-acetate 1,2,6-tris(3,3-dimethylbutanoate)
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:630199 HCAPLUS

DOCUMENT NUMBER: 129:296458

TITLE: Carbon-13 NMR Investigations of the Orientational
 Order in a Columnar Liquid Crystal

AUTHOR(S): Huang, Zhi; Sandstroem, Dick; Henriksson, Ulf;
 Maliniak, Arnold

CORPORATE SOURCE: Division of Physical Chemistry Arrhenius Laboratory,
 Stockholm University, Stockholm, S-106 91, Swed.

SOURCE: Journal of Physical Chemistry B (1998), 102(43),
 8395-8399

CODEN: JPCBFBK; ISSN: 1089-5647

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A natural abundance C-13 NMR study of benzene dissolved in a columnar liq.
 crystal formed by the carbohydrate mesogen octa-O-decanoyl-.beta.-
 cellobiose (Cel-II-10) is reported. The alignment of the mesophase in the
 magnetic field is sensitive to the field strength and to the thermal
 history of the sample. From C-13 line shapes, the director distribution
 functions and the mol. order parameter of the solute were estd. In
 contrast to most columnar phases, Cel-II-10 aligns parallel to the
 magnetic field. The orientational order parameter of benzene is pos.,
 which is expected for a columnar liq. crystal where the symmetry axis of
 the disk is aligned parallel to the column axis. However, an unexpected
 increase of the order parameter with increased temp. was obsd. This
 behavior is probably a consequence of an exchange process between
 different solvation sites in the columnar mesophase and indicates that the
 population in the environment with higher order parameter increases when
 the sample is heated.

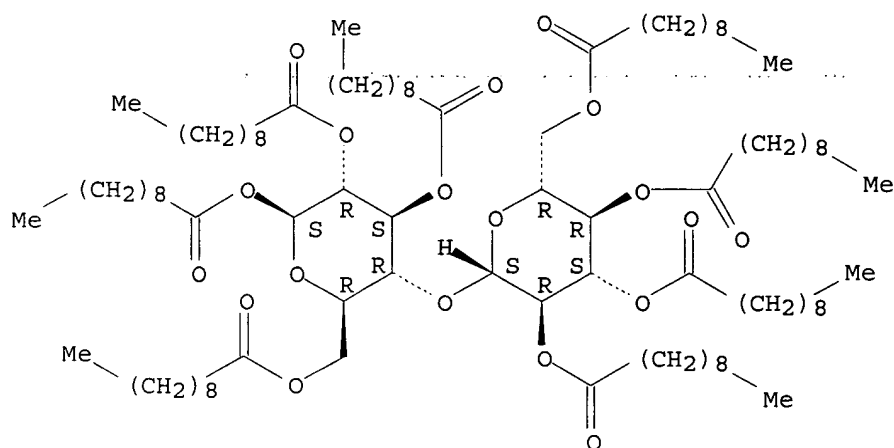
CC 75-11 (Crystallography and Liquid Crystals)

Section cross-reference(s): 77

IT 71-43-2, Benzene, properties 139559-65-2, Octa-O-decanoyl-.beta.-

cellobiose
 RL: PRP (Properties)
 (carbon-13 NMR investigations of orientational order of benzene in
 columnar liq. crystal)
 IT 139559-65-2, Octa-O-decanoyl-.beta.-cellobiose
 RL: PRP (Properties)
 (carbon-13 NMR investigations of orientational order of benzene in
 columnar liq. crystal)
 RN 139559-65-2 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-
 glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:605353 HCAPLUS

DOCUMENT NUMBER: 129:303032

TITLE: Thermotropic liquid crystalline poly(vinyl ether)s
 with pendant cellobiose residues. Synthesis and
 mesophase structure

AUTHOR(S): Takaragi, Akira; Miyamoto, Takeaki; Minoda, Masahiko;
 Watanabe, Junji

CORPORATE SOURCE: Institute Chemical Research, Kyoto University, Uji,
 611, Japan

SOURCE: Macromolecular Chemistry and Physics (1998), 199(9),
 2071-2077

CODEN: MCHPES; ISSN: 1022-1352

PUBLISHER: Huethig & Wepf Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of poly(vinyl ether)s (VEs) is described carrying pendant
 cellobiose heptadecanoate (CHD) residues and their mesomorphic properties
 were examd. by DSC, polarization microscopy and x-ray diffraction. The
 poly(VE)s were synthesized through cationic polymn. of a CHD-substituted
 VE, i.e., 10-(vinylloxy)decyl-2,2',3,3',4',6,6'-hepta-O-decanoyl-.beta.-D-
 cellobioside. From x-ray diffraction analyses, the mesophase at the
 poly(VE) proved to be closely similar to that of the star-shaped triplet
 deriv. The mesophase is characterized by the following features: it
 consists of discotic columns built up by a regular stacking of the pendant

CHD residues, each polymer main chain is presumed to have an extended conformation due to the periodic stacking of the pendant CHD moieties into a columnar structure, and each polymer mol. independently forms 3 discotic columns, which surround the main chain, without any intercalation of the CHD pendants originating from different polymer mols.

CC 36-2 (Physical Properties of Synthetic High Polymers)

Section cross-reference(s): 75

IT 214343-21-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(monomer; prepn. and polymn. of cellobiose-contg. vinyl ether)

IT 139559-65-2

RL: PRP (Properties)

(prepn. and cryst. properties of poly(vinyl ether) carrying pendant cellobiose heptadecanoate)

IT 214343-22-3P 214404-55-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(prepn. and cryst. properties of poly(vinyl ether) carrying pendant cellobiose heptadecanoate)

IT 110-75-8, 2-Chloroethyl vinyl ether 196098-40-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. and polymn. of cellobiose-contg. vinyl ether monomer)

IT 214343-21-2P

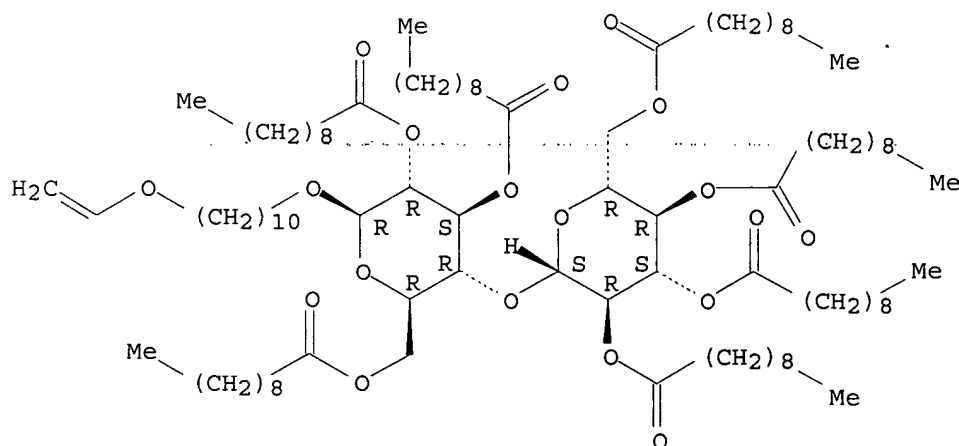
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(monomer; prepn. and polymn. of cellobiose-contg. vinyl ether)

RN 214343-21-2 HCAPLUS

CN .beta.-D-Glucopyranoside, 10-(ethenyloxy)decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 139559-65-2

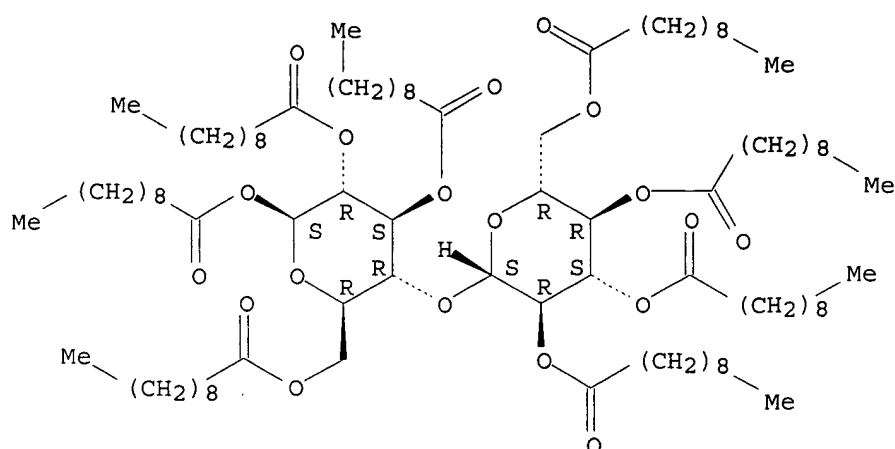
RL: PRP (Properties)

(prepn. and cryst. properties of poly(vinyl ether) carrying pendant cellobiose heptadecanoate)

RN 139559-65-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 214343-22-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cryst. properties of poly(vinyl ether) carrying pendant
cellobiose heptadecanoate)

RN 214343-22-3 HCAPLUS

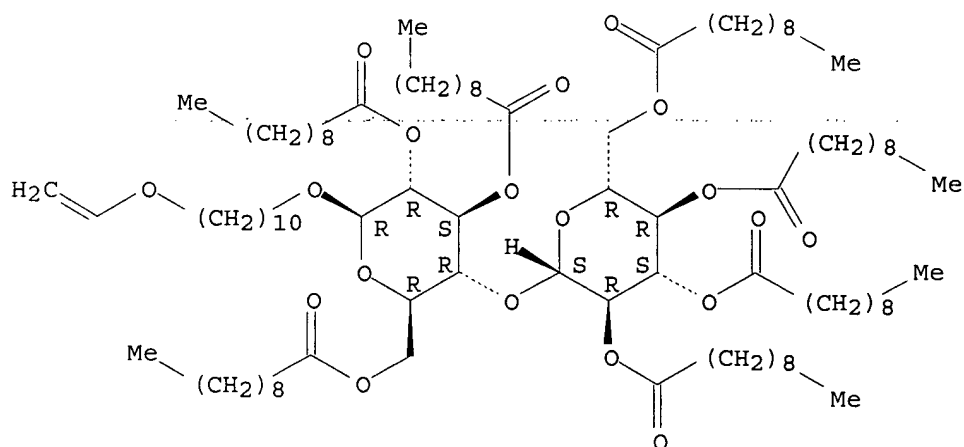
CN .beta.-D-Glucopyranoside, 10-(ethenyloxy)decyl 2,3,6-tris-O-(1-oxodecyl)-4-
O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, homopolymer
(9CI) (CA INDEX NAME)

CM 1

CRN 214343-21-2

CMF C94 H170 O19

Absolute stereochemistry.



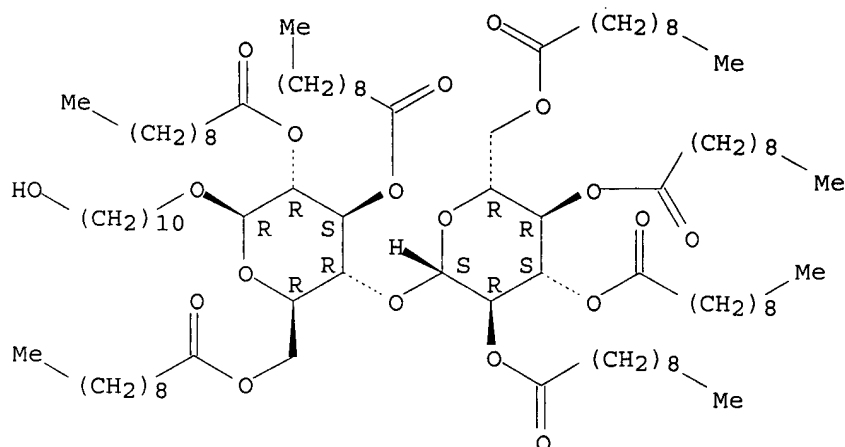
IT 196098-40-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and polymn. of cellobiose-contg. vinyl ether monomer)

RN 196098-40-5 HCAPLUS

CN .beta.-D-Glucopyranoside, 10-hydroxydecyl 4-O-[2,3,4,6-tetrakis-O-(1-
oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:373033 HCAPLUS

DOCUMENT NUMBER: 129:41576

TITLE: Synthesis and thermal properties of liquid crystalline side-chain polymers with pendant cellobiose residues
AUTHOR(S): Takaragi, Akira; Minoda, Masahiko; Miyamoto, Takeaki; Watanabe, Junji

CORPORATE SOURCE: Institute Chemical Research, Kyoto University, Uji, 611, Japan

SOURCE: Macromolecular Chemistry and Physics (1998), 199(6), 1119-1126

CODEN: MCHPES; ISSN: 1022-1352

PUBLISHER: Huethig & Wepf Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two series of thermotropic polymethacrylate (PM) samples with pendant cellobiose residues and an alkyl spacer (no. of C atoms $n = 4$ and 10) were synthesized, and their mesomorphic properties were investigated to elucidate the function of acylated cellobiose moieties as discotic mesogens by differential scanning calorimetry (DSC), polarization microscopy, and x-ray diffraction. The PM-4 samples with a short spacer showed 2 kinds of mesophases in a wide temp. region up to the degrading temp. of the sample, i.e., approx. 230.degree., whereas the PM-10 samples with a long spacer showed a single mesophase between 45-135.degree.. X-ray diffraction data suggested that both the mesophases formed by PM-4 and PM-10 belong to a kind of discotic columnar phases in which the side-chain mesogens form the discotic columns around the polymer backbone.

CC 36-2 (Physical Properties of Synthetic High Polymers)

Section cross-reference(s): 1, 35, 63, 75

IT 112-47-0, 1,10-Decanediol 920-46-7, Methacryloyl chloride

139559-65-2 208181-91-3 208181-92-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)

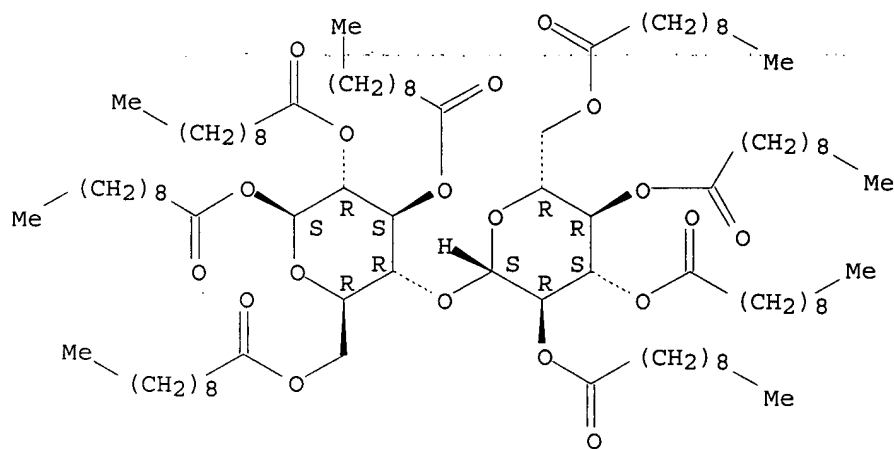
IT 196098-40-5P 208181-88-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and polymn. of cellobiose methacrylate monomers for

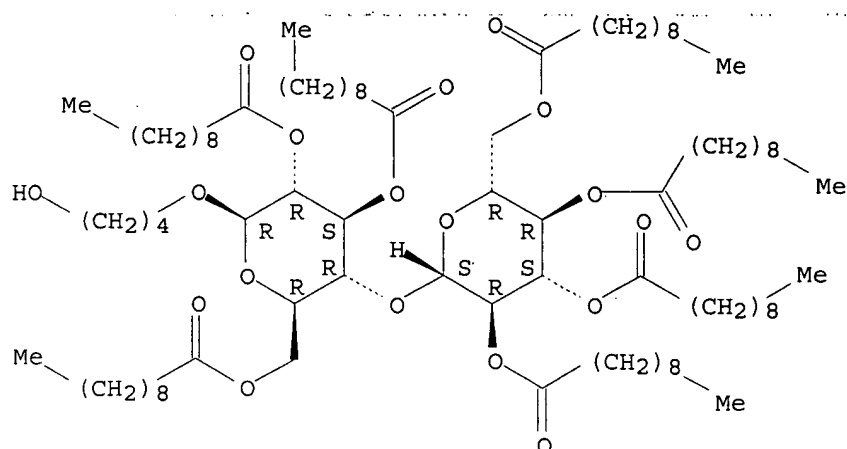
- liq.-cryst. side-chain polymethacrylates)
- IT 208181-89-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and polymn. of cellobiose methacrylate monomers for
 liq.-cryst. side-chain polymethacrylates)
- IT 208181-93-5P 208181-95-7P 208265-82-1P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and thermal properties of liq.-cryst. side-chain
 polymethacrylates with cellobiose groups)
- IT 139559-65-2 208181-92-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (synthesis and polymn. of cellobiose methacrylate monomers for
 liq.-cryst. side-chain polymethacrylates)
- RN 139559-65-2 HCAPLUS
- CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- RN 208181-92-4 HCAPLUS
- CN .beta.-D-Glucopyranoside, 4-hydroxybutyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 196098-40-5P

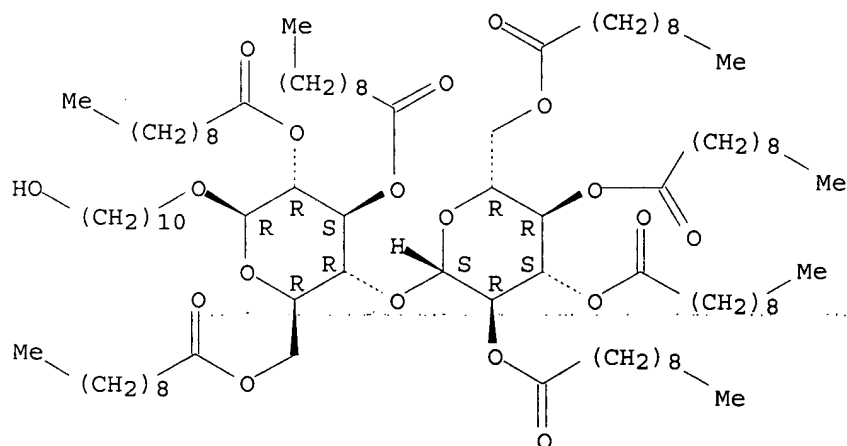
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)

RN 196098-40-5 HCAPLUS

CN .beta.-D-Glucopyranoside, 10-hydroxydecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 208181-89-9P

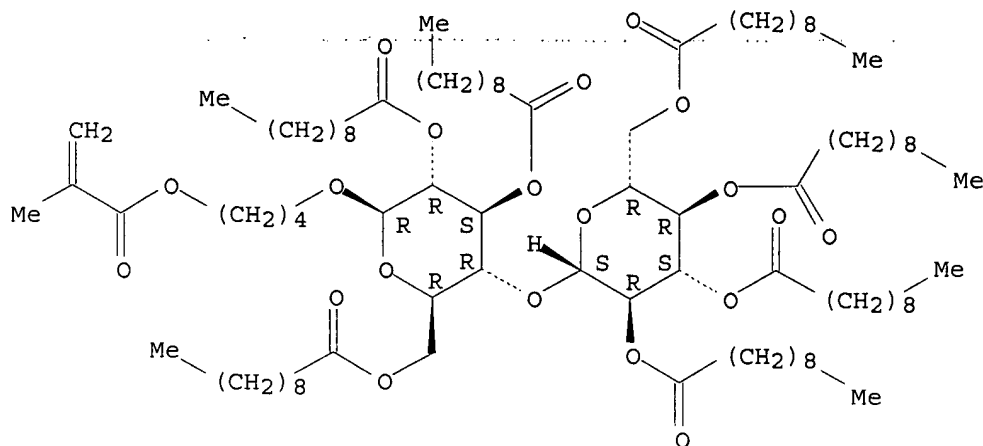
RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)

RN 208181-89-9 HCAPLUS

CN .beta.-D-Glucopyranoside, 4-[(2-methyl-1-oxo-2-propenyl)oxy]butyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 208181-95-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and thermal properties of liq.-cryst. side-chain
polymethacrylates with cellobiose groups)

RN 208181-95-7 HCAPLUS

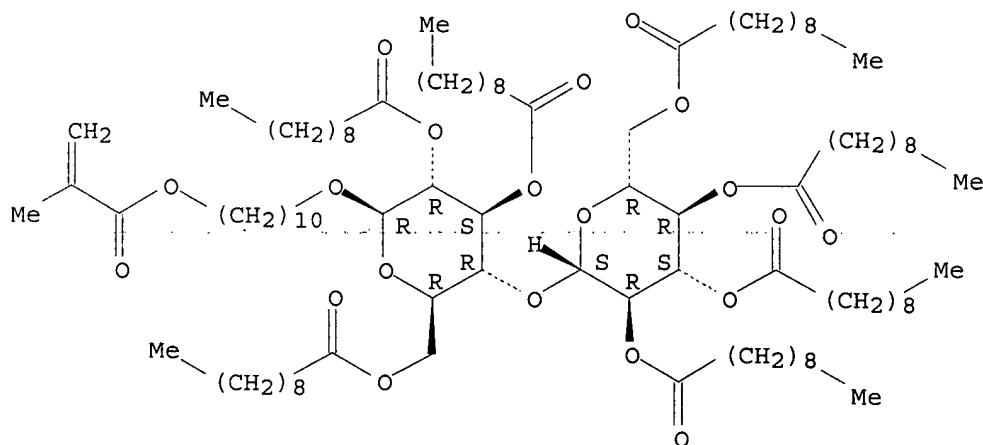
CN .beta.-D-Glucopyranoside, 10-[(2-methyl-1-oxo-2-propenyl)oxy]decyl
4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-,
2,3,6-tris(decanoate), homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 208181-94-6

CMF C96 H172 O20

Absolute stereochemistry.



L10 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:752615 HCAPLUS

DOCUMENT NUMBER: 128:68813

TITLE: Surface-imaging of frozen blue phases in a discotic
liquid crystal with atomic force microscopy

AUTHOR(S): Hauser, Anton; Thieme, Mario; Saupe, Alfred; Heppke,
Gerd; Krueker, Daniel

CORPORATE SOURCE: Max-Planck-Arbeitsgruppe Flüssigkristalline Systeme an der Martin-Luther-Universität Halle, Halle, D-06108, Germany

SOURCE: Journal of Materials Chemistry (1997), 7(11), 2223-2229
CODEN: JMACEP; ISSN: 0959-9428

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Discotic cholesteric phases with extremely small pitches were obtained with cellobiose derivs. as chiral dopants. These binary mixts. tend to form up to three distinct blue phases. An interesting property of these mixts. is that the blue phases can be supercooled to a glass-like state. Microscopic studies, reflection spectra, and Kossel diagrams all indicate that the three discotic blue phases BPD I, BPD II and BPD III are analogous to the known calamitic modifications. In addn. to the optical studies, the authors studied the free surfaces of the frozen blue phases using at. force microscopy.

CC 75-11 (Crystallography and Liquid Crystals)

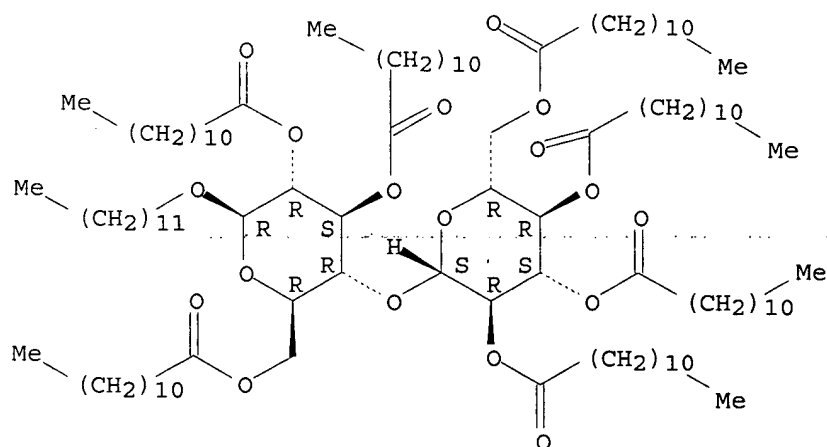
IT 129530-43-4 200396-07-2
RL: PRP (Properties)
(surface-imaging of frozen blue phases in perlauroyl cellobioside-hexakis[(nonylphenyl)ethynyl]benzene discotic liq. crystal mixt. with at. force microscopy)

IT 129530-43-4
RL: PRP (Properties)
(surface-imaging of frozen blue phases in perlauroyl cellobioside-hexakis[(nonylphenyl)ethynyl]benzene discotic liq. crystal mixt. with at. force microscopy)

RN 129530-43-4 HCAPLUS

CN .beta.-D-Glucopyranoside, dodecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tridodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:534219 HCAPLUS

DOCUMENT NUMBER: 127:270764

TITLE: Oligosaccharide-based thermotropic liquid crystals.
Part 4. Synthesis of cellobiose-based twin and triplet derivatives and their mesophase properties

AUTHOR(S): Takaragi, Akira; Sugiura, Makoto; Minoda, Masahiko;
Miyamoto, Takeaki; Watanabe, Junji
CORPORATE SOURCE: Institute Chemical Research, Kyoto university, Uji,
611, Japan
SOURCE: Macromolecular Chemistry and Physics (1997), 198(8),
2583-2598
CODEN: MCHPES; ISSN: 1022-1352
PUBLISHER: Huethig & Wepf
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Previous work from this lab. has shown that cellobiose octaalkanoate (COA) functions as a thermotropic discotic mesogen, forming a hexagonal ordered columnar phase (Dho). In this work, we prepd. the COA-based discotic twin and triplet derivs. and examd. the mesomorphic properties of the derivs. by DSC, polarization microscopy, and XRD. In the former deriv., 2 cellobiose heptadecanoate (CHD) mols. (monomers) are combined through an alkyl spacer of varying length by ether and ester linkages at the C-1 position of the reducing end units of the monomers. Three CHD mols. having an alkyl spacer are connected with a coupling agent for the latter deriv. The results revealed that (i) all the twin derivs. form a distinct discotic columnar phase, (ii) the thermal stability of the mesophases of the twins is enhanced, compared with that of the monomer, when the length of the flexible spacer is appropriate, (iii) the twins with a relatively short spacer form a discotic rectangular ordered (Dro) phase, while those with a longer spacer form a pseudo-Dho phase, (i.v.) the triplets also form a discotic columnar mesophase, but not a hexagonal ordered columnar (Dho) phase, (v) the thermal stability of the mesophases of the triplets strongly depends on the chem. nature of coupling cores, and (vi) the packing structures of the cellobiose cores within the columns of both derivs. are markedly different from that of the monomer.

CC 75-11 (Crystallography and Liquid Crystals)

Section cross-reference(s): 33

IT 111-19-3, Decanedioyl dichloride 112-47-0, 1,10-Decanediol 4422-95-1, 1,3,5-Benzenetricarbonyl trichloride 21646-49-1, Tetradecanedioyl dichloride 23666-71-9, 1,2,3-Propanetricarbonyl trichloride 45270-18-6, Octadecanedioyl dichloride 101702-50-5, Eicosanedicarbonyl dichloride 139559-65-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs.)

IT 196098-36-9P 196098-40-5P 196098-43-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs.)

IT 196098-45-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs. and their phase transition and texture)

IT 196098-46-1P 196098-47-2P 196098-48-3P

196098-49-4P 196216-58-7P 196216-59-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs. and their phase transition, texture, and lattice parameters)

IT 139559-65-2

RL: RCT (Reactant); RACT (Reactant or reagent)

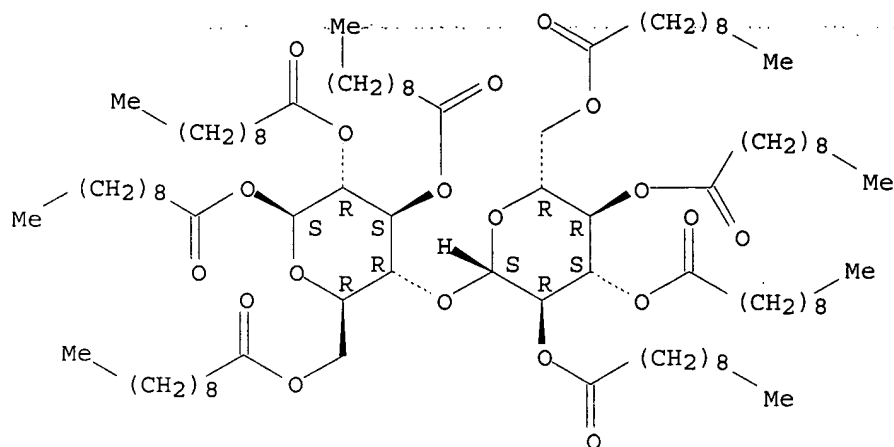
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs.)

RN 139559-65-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-

glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



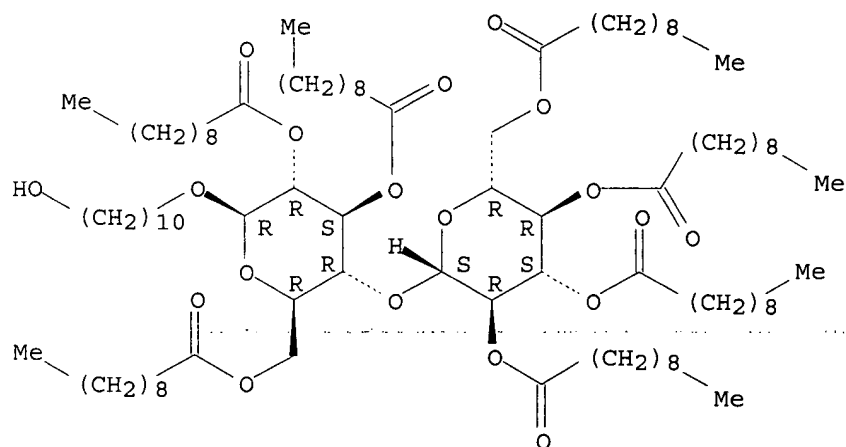
IT 196098-40-5P 196098-43-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet
derivs.)

RN 196098-40-5 HCAPLUS

CN .beta.-D-Glucopyranoside, 10-hydroxydecyl 4-O-[2,3,4,6-tetrakis-O-(1-
oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA
INDEX NAME)

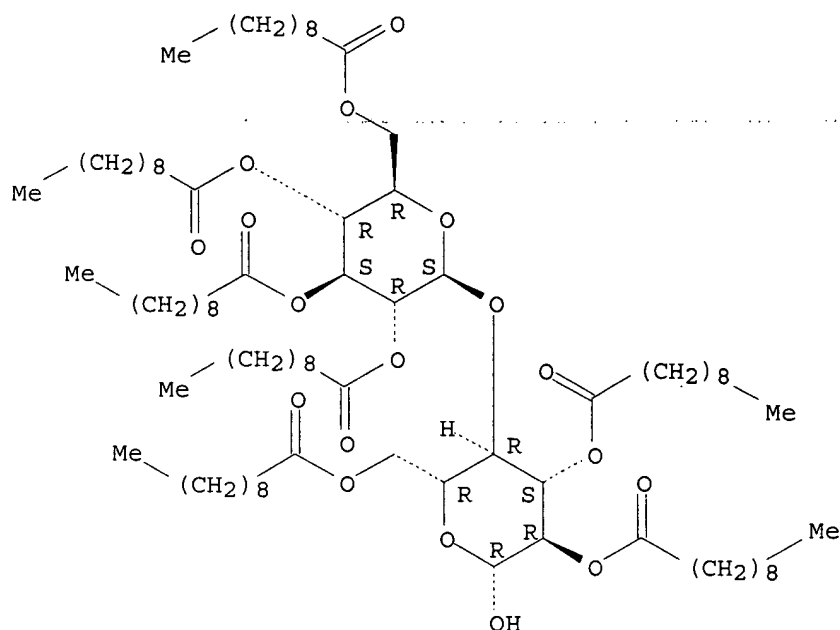
Absolute stereochemistry.



RN 196098-43-8 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-
glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

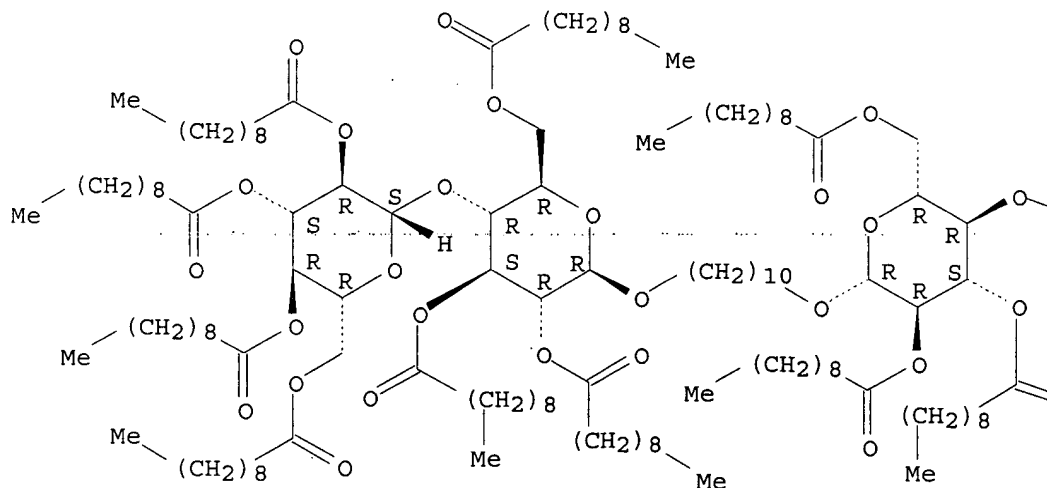
Absolute stereochemistry.

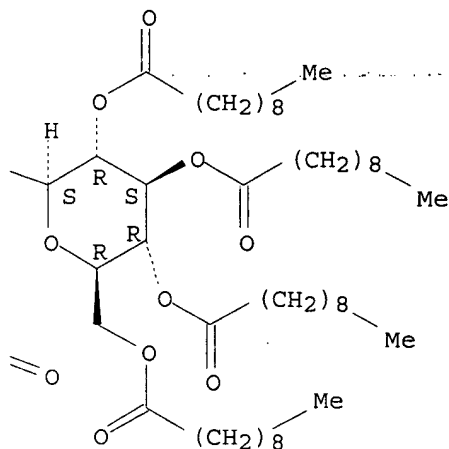


IT 196098-45-0P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet
 derivs. and their phase transition and texture)
 RN 196098-45-0 HCAPLUS
 CN .beta.-D-Glucopyranoside, 1,10-decanediyl bis[4-O-[2,3,4,6-tetrakis-O-(1-
 oxodecyl)-.beta.-D-glucopyranosyl]-, hexakis(decanoate) (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

PAGE 1-A





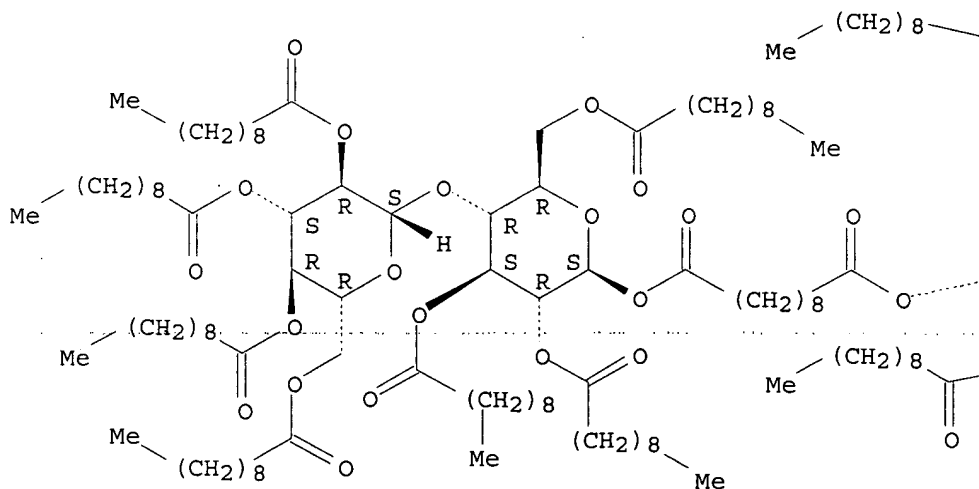
IT 196098-46-1P 196098-47-2P 196098-48-3P
196098-49-4P

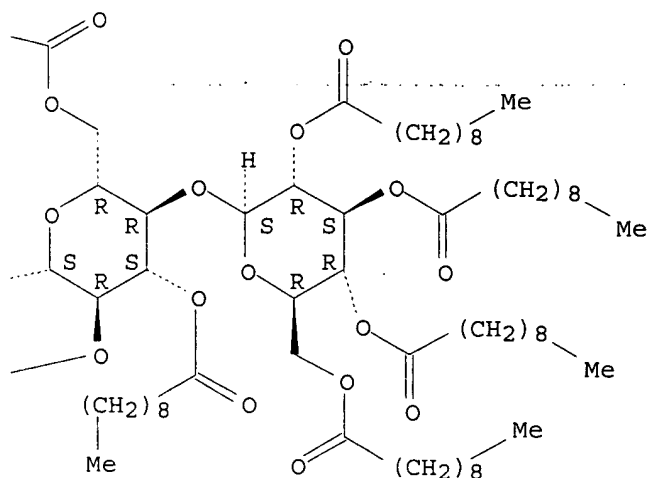
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet
derivs. and their phase transition, texture, and lattice parameters)

RN 196098-46-1 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-
glucopyranosyl]-, 1,1'-decanedioate 2,2',3,3',6,6'-hexakis(decanoate)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

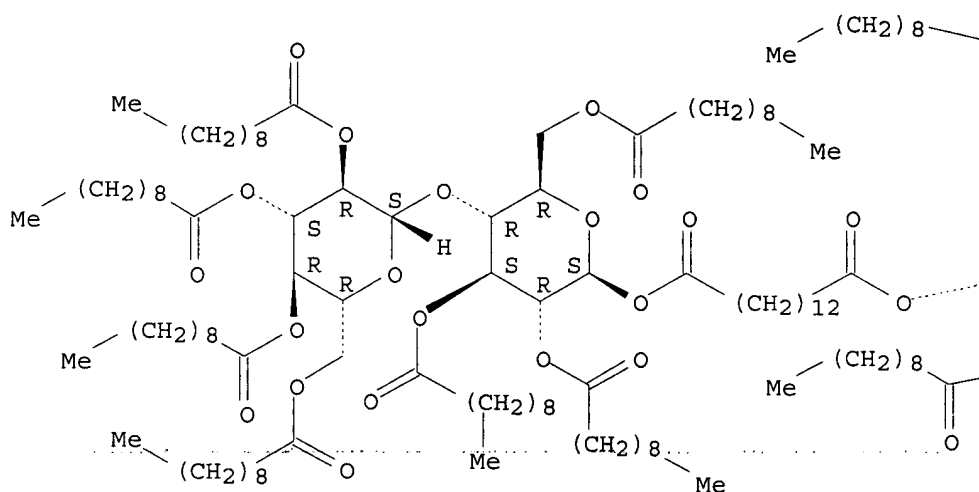


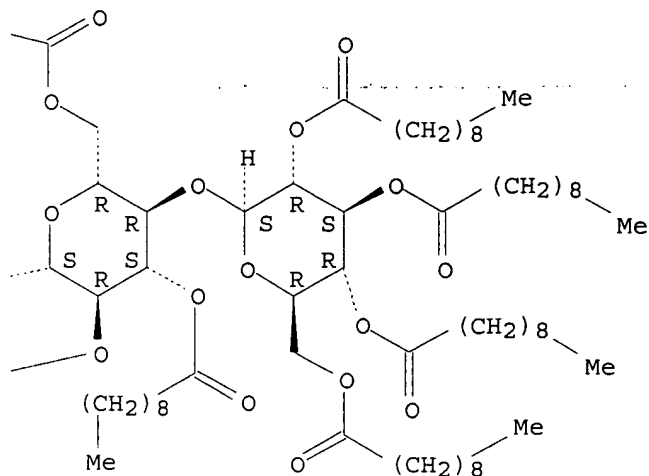


RN 196098-47-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1,1'-tetradecanedioate 2,2',3,3',6,6'-hexakis(decanoate)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

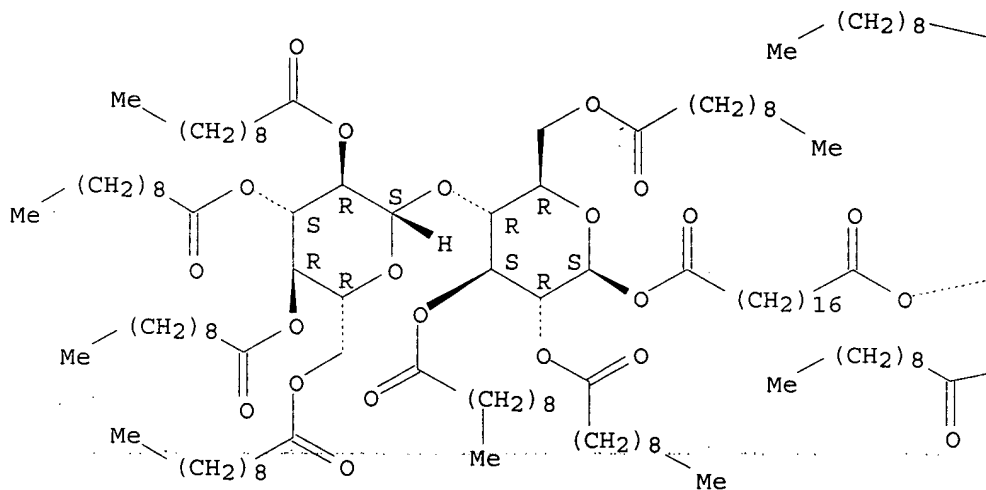


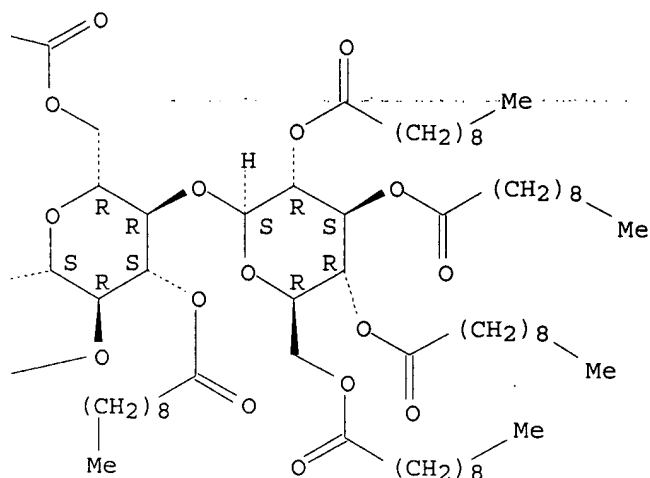


RN 196098-48-3 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1,1'-octadecanedioate 2,2',3,3',6,6'-hexakis(decanoate)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



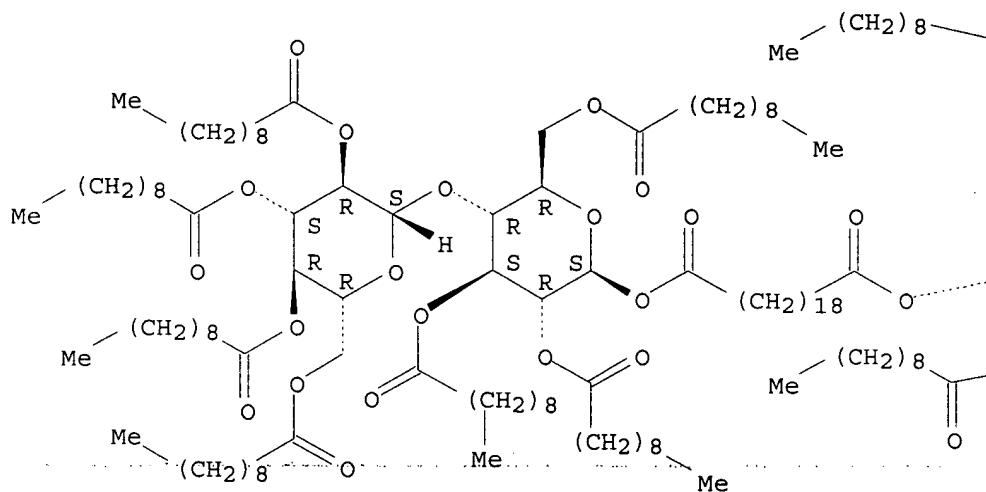


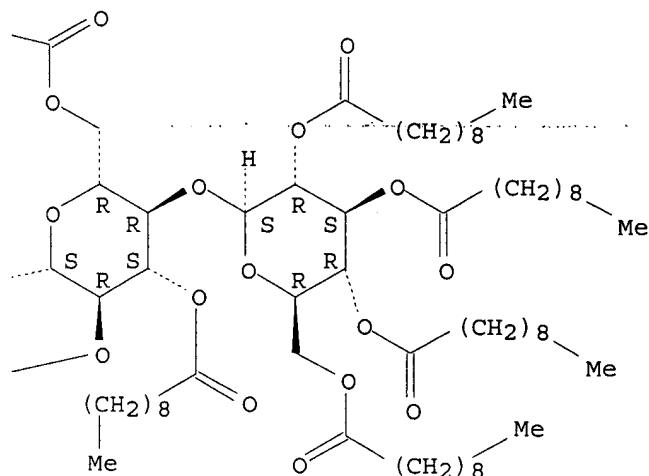
RN 196098-49-4 HCAPLUS

CN	.beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1,1'-eicosanedioate 2,2',3,3',6,6'-hexakis(decanoate)
~	(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





L10 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:158867 HCAPLUS

DOCUMENT NUMBER: 124:270996

TITLE: Deuterium NMR study of a probe molecule dissolved in a carbohydrate liquid crystal.

AUTHOR(S): Sandstroem, D.; Stenutz, R.; Widmalm, G.; Maliniak, A.

CORPORATE SOURCE: Div. Physical Chem., Stockholm Univ., Stockholm, S-106-91, Swed.

SOURCE: Journal of the Chemical Society, Faraday Transactions (1996), 92(1), 111-15

CODEN: JCFTEV; ISSN: 0956-5000

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A deuterium NMR investigation of C₆D₆ dissolved in the discotic mesogen octa-O-decanoyl-β-D-glucopyranoside (Cel-II-10) is reported. The liq.-cryst. phase was found to be uniaxial in agreement with a previous x-ray study. The influence of magnetic field strength and thermal treatment on the mesophase alignment was investigated. From ²H NMR lineshape simulations, the form of the director distribution function was estd. In contrast to most discotics, the columns of Cel-II-10 orient parallel to the external field indicating that the anisotropic diamagnetic susceptibility of this mesophase is pos. An increase of the quadrupolar splitting of C₆D₆ was obsd. when the sample was heated. This behavior is interpreted in terms of a fast dynamic equil. between different solvation sites in the carbohydrate liq. crystal. The ²H NMR spectra in the solid phase also indicated an exchange process between several sites.

CC 65-5 (General Physical Chemistry)

Section cross-reference(s): 75

IT 1076-43-3, Benzene-d₆ 139559-65-2

RL: PRP (Properties)

(deuterium NMR study of a probe mol. dissolved in a carbohydrate liq. crystal)

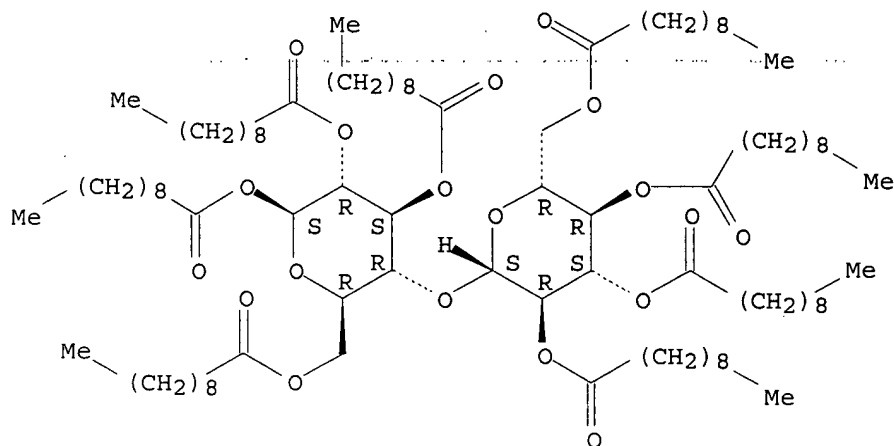
IT 139559-65-2

RL: PRP (Properties)

(deuterium NMR study of a probe mol. dissolved in a carbohydrate liq. crystal)

RN 139559-65-2 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:9929 HCAPLUS

DOCUMENT NUMBER: 124:176696

TITLE: Gelation of fully acylated cellobiose in alkane solution

AUTHOR(S): Ide, Nobuhiro; Fukuda, Takeshi; Miyamoto, Takeaki
 CORPORATE SOURCE: Institute Chemical Research, Kyoto University, Uji, 611, Japan

SOURCE: Bulletin of the Chemical Society of Japan (1995), 68(12), 3423-8
 CODEN: BCSJA8; ISSN: 0009-2673

PUBLISHER: Nippon Kagakkai

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cellobiose octa(decanoate), a discotic columnar mesogen, was found to form in hexadecane soln. various mol. assemblies such as a lyotropic liq. crystal of discotic columnar type, multimol. micelles, and a thermoreversible gel, depending on the concn. and temp. The gelation, obsd. even at very low concns., say, <0.01 wt. fraction of the mesogenic compd., is believed to proceed by local coagulation of long threadlike micelles into micro-liq.-crystallites, which work as cross-linked points combining the threadlike micelles. This will be a new type of gel that could be termed a "liq. cryst. gel".

CC 33-4 (Carbohydrates)

Section cross-reference(s): 75

IT 139559-65-2P, .beta.-Cellobiose octa(decanoate)

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and liq. cryst. formation during gelation of cellobiose octadecanoate)

IT 139559-65-2P, .beta.-Cellobiose octa(decanoate)

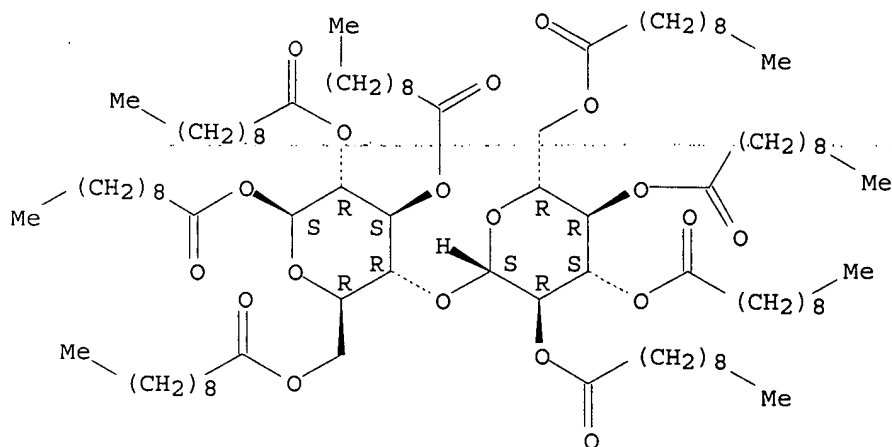
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and liq. cryst. formation during gelation of cellobiose octadecanoate)

RN 139559-65-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-

glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:905031 HCAPLUS

DOCUMENT NUMBER: 124:102558

TITLE: Discotic columnar liquid crystals in oligosaccharide derivatives III. Anomeric effects on the thermo-mesomorphic properties of cellobiose octa-alkanoates

AUTHOR(S): Takada, A.; Ide, N.; Fukuda, T.; Miyamoto, T.; Yamagata, K.; Watanabe, J.

CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan

SOURCE: Liquid Crystals (1995), 19(4), 441-8

CODEN: LICRE6; ISSN: 0267-8292

PUBLISHER: Taylor & Francis

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The .alpha.- and .beta.-anomers of cellobiose octa-alkanoates with purities .gtorsim.95 per cent were prepd. from .beta.-cellobiose by two simple esterification methods. The C no. n of the acyl substituents ranged from 7 to 10 in both anomers. Both .alpha.- and .beta.-anomers exhibited two types of discotic columnar phases (Dho and Dro), depending on n and temp., but their phase diagrams were appreciably different. Generally, the .alpha.-anomers formed more stable mesophases than the .beta.-anomers. In the Dro phase of the .beta.-anomers, the column axis was tilted from the normal to the disks, while no such tilting was obsd. in the other phases.

CC 75-11 (Crystallography and Liquid Crystals)

Section cross-reference(s): 33

IT 139432-94-3P; .beta.-Cellobiose octaoctanoate 139432-95-4P

, .beta.-Cellobiose octanonanoate 139559-65-2P,

.beta.-Cellobiose octadecanoate 153113-90-7P, .beta.-Cellobiose

octaundecanoate 172585-65-8P, .alpha.-Cellobiose octaoctanoate

172585-66-9P, .alpha.-Cellobiose octanonanoate

172585-67-0P, .alpha.-Cellobiose octadecanoate

172585-68-1P, .alpha.-Cellobiose octaundecanoate

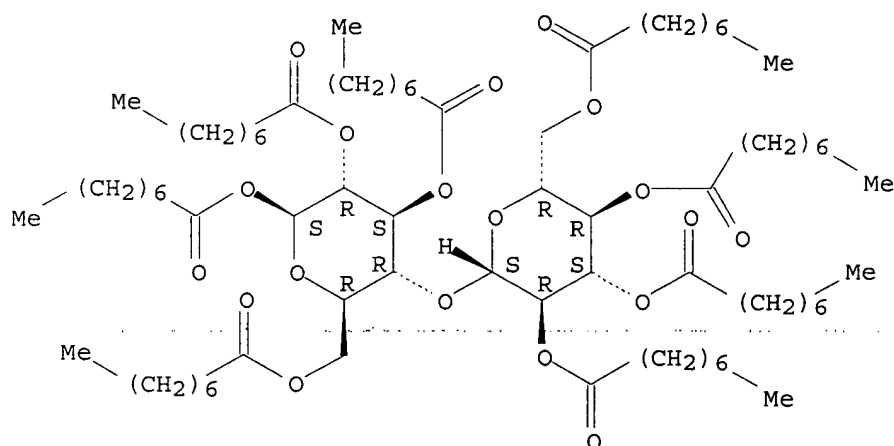
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(prepn. and anomeric effects on liq. crystal properties of column

discotic)

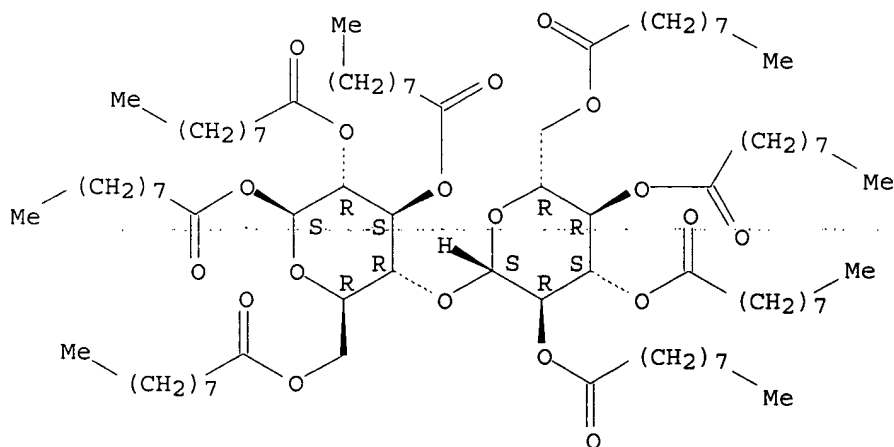
IT 139432-94-3P, .beta.-Cellobiose octaoctanoate 139432-95-4P
 , .beta.-Cellobiose octanonanoate 139559-65-2P,
 .beta.-Cellobiose octadecanoate 153113-90-7P, .beta.-Cellobiose
 octaundecanoate 172585-65-8P, .alpha.-Cellobiose octaoctanoate
 172585-66-9P, .alpha.-Cellobiose octanonanoate
 172585-67-0P, .alpha.-Cellobiose octadecanoate
 172585-68-1P, .alpha.-Cellobiose octaundecanoate
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); PROC (Process)
 (prepn. and anomeric effects on liq. crystal properties of column
 discotic)
 RN 139432-94-3 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-
 glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 139432-95-4 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-
 glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

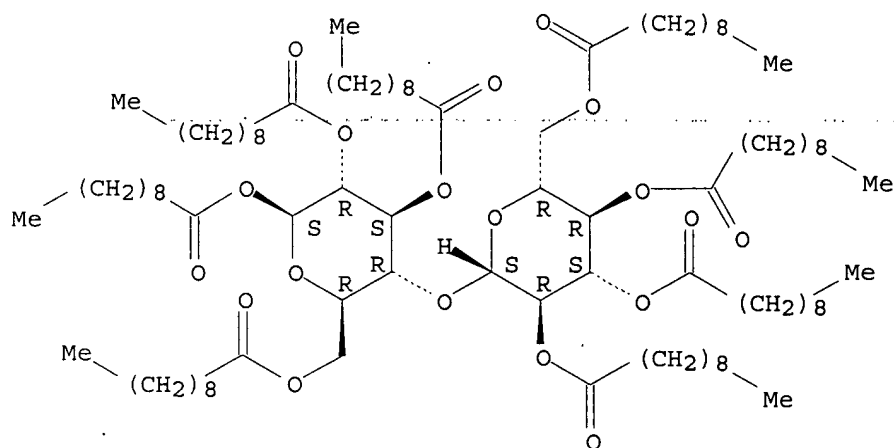
Absolute stereochemistry.



RN 139559-65-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

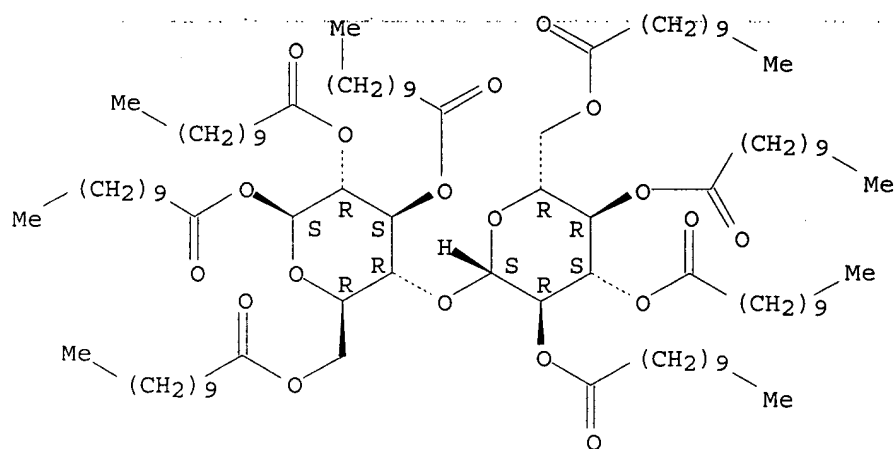
Absolute stereochemistry.



RN 153113-90-7 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

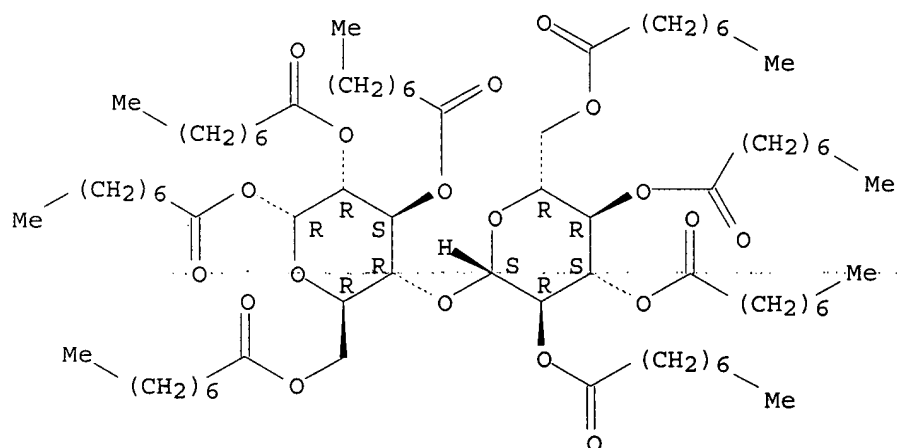
Absolute stereochemistry.



RN 172585-65-8 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

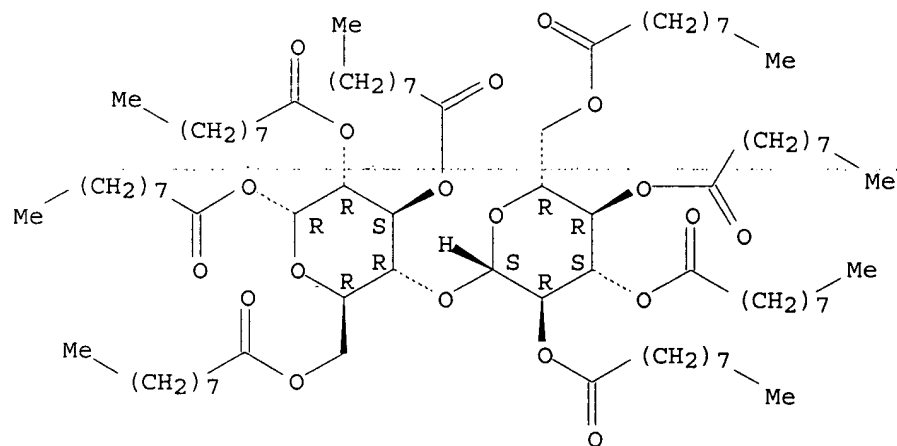
Absolute stereochemistry.



RN 172585-66-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

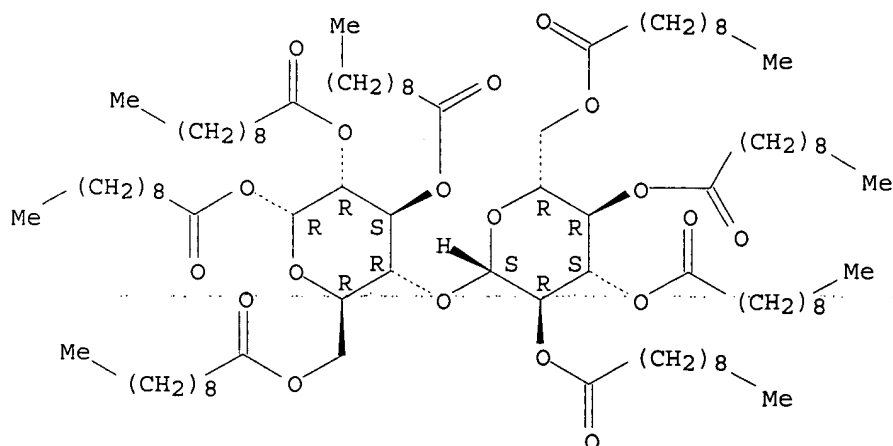
Absolute stereochemistry.



RN 172585-67-0 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

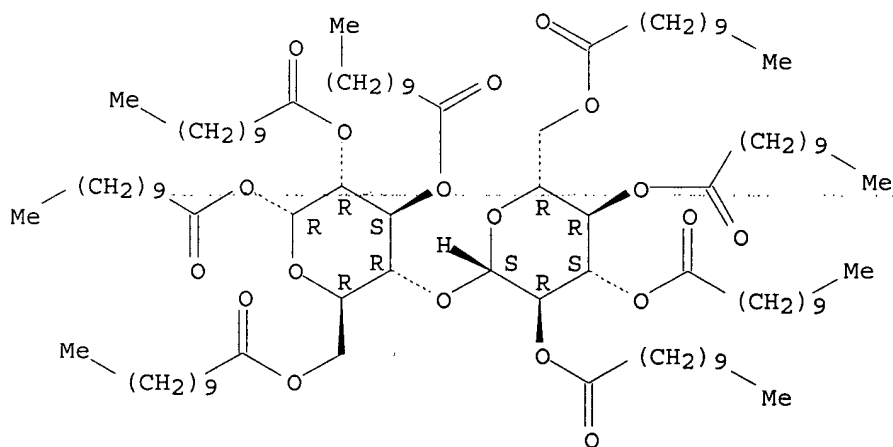
Absolute stereochemistry.



RN 172585-68-1 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:167050 HCAPLUS

DOCUMENT NUMBER: 120:167050

TITLE: Chain-Length Dependence of the Mesomorphic Properties of Fully Decanoated Cellulose and Cellooligosaccharides

AUTHOR(S): Takada, Akihiko; Fujii, Kazunari; Watanabe, Junji; Fukuda, Takeshi; Miyamoto, Takeaki

CORPORATE SOURCE: Institute for Chemical Research, Kyoto University, Uji, 611, Japan

SOURCE: Macromolecules (1994), 27(6), 1651-3

CODEN: MAMOBX; ISSN: 0024-9297

DOCUMENT TYPE: Journal

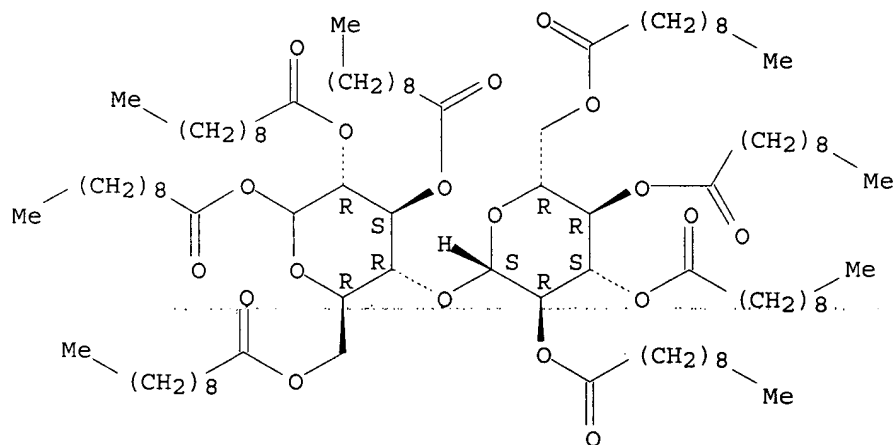
LANGUAGE: English

AB The mesomorphic properties of fully decanoated cellulose and cellooligosaccharides were studied as a function of the d.p. Oligomeric

derivs. with d.p. < 5 formed a discotic columnar phase, whereas polymeric derivs. with d.p. > 20 formed a hexagonal columnar phase. The mol. axis in the discotic columnar phase was perpendicular to the column axis, whereas that in the columnar phase of the polymeric derivs. was parallel to the column axis. The transition from the perpendicular to the parallel orientation of mol. axis should occur at a d.p. .apprx. 10, which is actually unobservable because crystn. proceeds for samples with $5 < \text{d.p.} < 20$.

CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
 IT 9004-34-6D, Cellulose, decanoated 9056-00-2, Cellulose tridecanoate
 128940-28-3
 RL: PRP (Properties)
 (mesomorphic properties of, chain length and mol. wt. effects on)
 IT 128940-28-3
 RL: PRP (Properties)
 (mesomorphic properties of, chain length and mol. wt. effects on)
 RN 128940-28-3 HCAPLUS
 CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:147566 HCAPLUS

DOCUMENT NUMBER: 120:147566

TITLE: First observation of selective reflection and blue phases in chiral discotic liquid crystals
 AUTHOR(S): Krueker, D.; Kitzrow, H. S.; Heppke, G.; Vill, V.
 CORPORATE SOURCE: Iwan-N.-Stranski-Inst., Berlin, D-10623, Germany
 SOURCE: Berichte der Bunsen-Gesellschaft (1993), 97(10), 1371-5

CODEN: BBPCAX; ISSN: 0005-9021

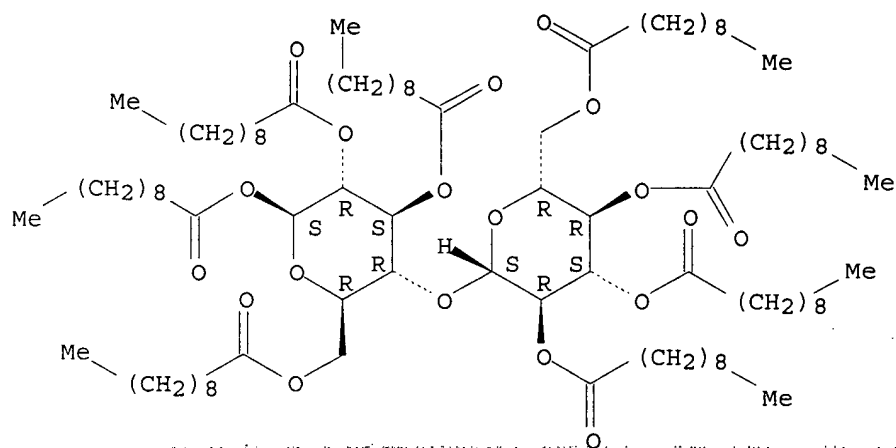
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The helical structure was studied of discotic cholesteric liq. crystals using cellobiose derivs. as chiral dopants in a discotic nematic host. A characteristic property of the new mixts. is the occurrence of a glass-like state. Due to extremely small pitches, selective reflection was obsd. in a chiral discotic system. Discotic blue phases were obsd. Microscopic studies, reflection spectra, and Kossel diagrams indicate the appearance of 3 discotic blue phases, BPD I, BPD II, and BPD III, which

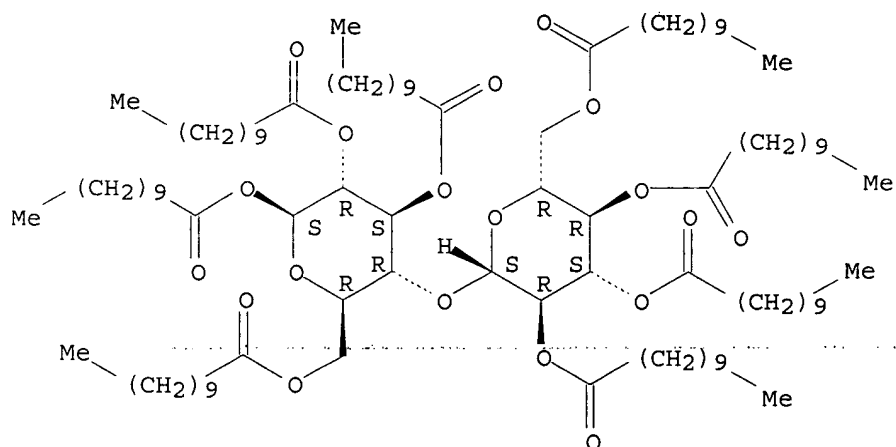
behave similar to the known calamitic modifications.
 CC 73-4 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
 Section cross-reference(s): 75
 IT 133938-14-4 139559-65-2 153113-90-7
 RL: PRP (Properties)
 (selective reflection and blue phases in chiral discotic mixt. of hexakis(nonylphenylethynyl)benzene and)
 IT 139559-65-2 153113-90-7
 RL: PRP (Properties)
 (selective reflection and blue phases in chiral discotic mixt. of hexakis(nonylphenylethynyl)benzene and)
 RN 139559-65-2 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 153113-90-7 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:666075 HCAPLUS

DOCUMENT NUMBER: 119:266075

TITLE: Characterization of the dominant halophilic archaea in a bacterial bloom in the Dead Sea

AUTHOR(S): Oren, Aharon; Gurevich, Peter

CORPORATE SOURCE: Alexander Silberman Inst. Life Sci., Hebrew Univ. Jerusalem, Jerusalem, Israel

SOURCE: FEMS Microbiology Ecology (1993), 12(4), 249-56

CODEN: FMECEZ; ISSN: 0168-6496

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A mass bloom of halophilic archaea developed in the Dead Sea in the summer of 1992, with peak densities of $>3 \times 10^7$ cells/mL, imparting a red coloration to the water. Microscopical examn. showed a numerical dominance of pleomorphic, flat cells. Attempts to identify the dominant type of halophilic archaea by means of growth expts., both on agar plates and by diln. in liq. media, were unsuccessful, as viable counts obtained were two or more orders of magnitude lower than the total microscopic counts. Anal. of the polar lipids in the Dead Sea biomass during the bloom showed one major glycolipid to be present in the exts., corresponding with the sulfated diglycosyl diether lipid (S-DGD-1) characteristic of the genus *Haloferax*. No indications were found for the presence of significant amts. of other glycolipids that indicate the presence of large nos. of Dead Sea archaea such as *Halobacterium sodomense* or *Haloarcula marismortui*, or *Halobacterium* species such as *H. halobium*, *H. salinarium* and *H. saccharovorrum*. Thus, the numerically dominant organism in the bloom is probably a difficult to culture, not yet isolated, representative of the genus *Haloferax*.

CC 10-1 (Microbial, Algal, and Fungal Biochemistry)

IT 81252-01-9 151419-06-6 151419-07-7 151419-08-8 151436-93-0

RL: PROC (Process)

(of halophilic archaeobacteria, identification of)

IT 151419-06-6

RL: PROC (Process)

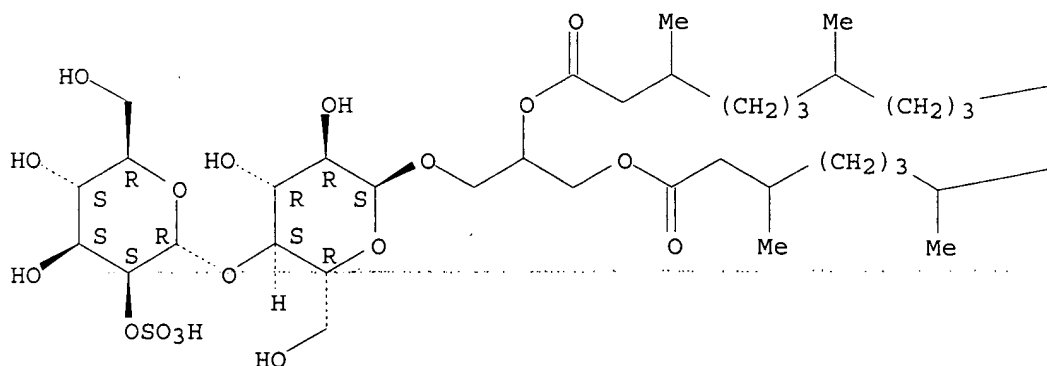
(of halophilic archaeobacteria, identification of)

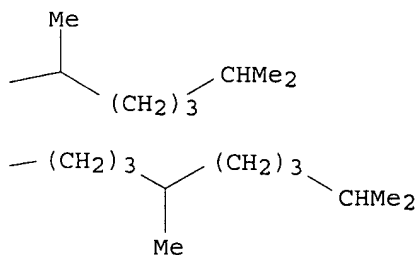
RN 151419-06-6 HCAPLUS

CN .alpha.-D-Glucopyranoside, 2,3-bis[(3,7,11,15-tetramethyl-1-oxohexadecyl)oxy]propyl 4-O-(2-O-sulfo-.alpha.-D-mannopyranosyl) - (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





L10 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:623566 HCAPLUS

DOCUMENT NUMBER: 117:223566

TITLE: Columnar liquid crystals in oligosaccharide derivatives. II. Two types of discotic columnar liquid-crystalline phase of cellobiose alkanoates
AUTHOR(S): Takada, A.; Fukuda, T.; Miyamoto, T.; Yakoh, Y.; Watanabe, J.

CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan

SOURCE: Liquid Crystals (1992), 12(2), 337-45

CODEN: LICRE6; ISSN: 0267-8292

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of cellobiose octaalkanoates, Cel-II-n (n is the C no. of the alkyl chain), with n = 7-14 were prep'd. and their mesogenic properties exam'd. by DSC, optical polarizing microscopy and x-ray diffraction. All of these comp'ds. form enantiotropic discotic columnar phases, in which the columns are built up by a regular stacking of the cellobiose moieties and are packed in a 2-dimensional lattice. Homologs with n = 9-14 form the Dh0 phase only while the comp'd. with n = 7 forms the Dr0 phase at lower temps. Structural parameters obtained from x-ray diffraction studies are presented for both phases.

CC 75-11 (Crystallography and Liquid Crystals)

Section cross-reference(s): 33

IT 128940-28-3P 143036-62-8P 143074-16-2P

143074-17-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liq. crystal, prepn. and properties and columnar discotic structure of)

IT 143062-39-9P 144238-71-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liq. crystal, prepn. and properties of)

IT 128940-28-3P 143036-62-8P 143074-16-2P

143074-17-3P

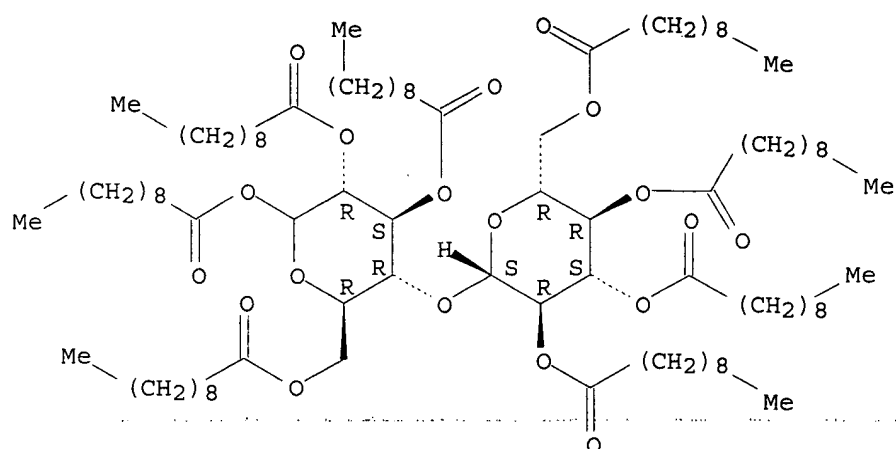
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liq. crystal, prepn. and properties and columnar discotic structure of)

RN 128940-28-3 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

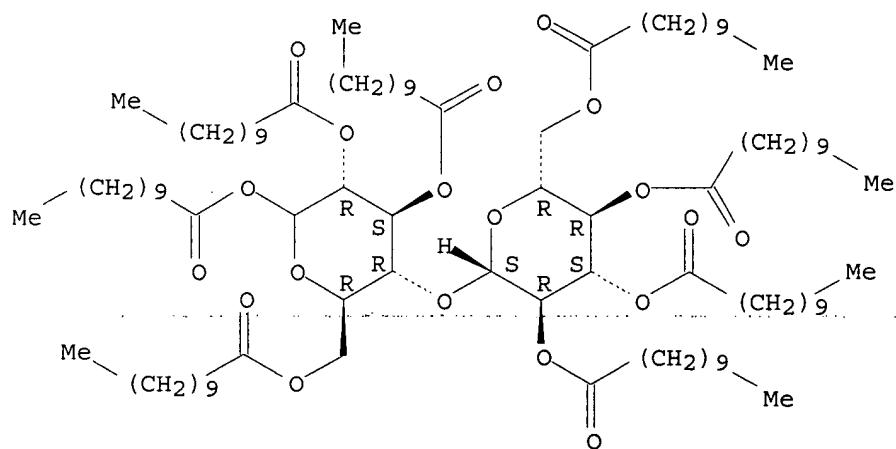
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RN 143036-62-8 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

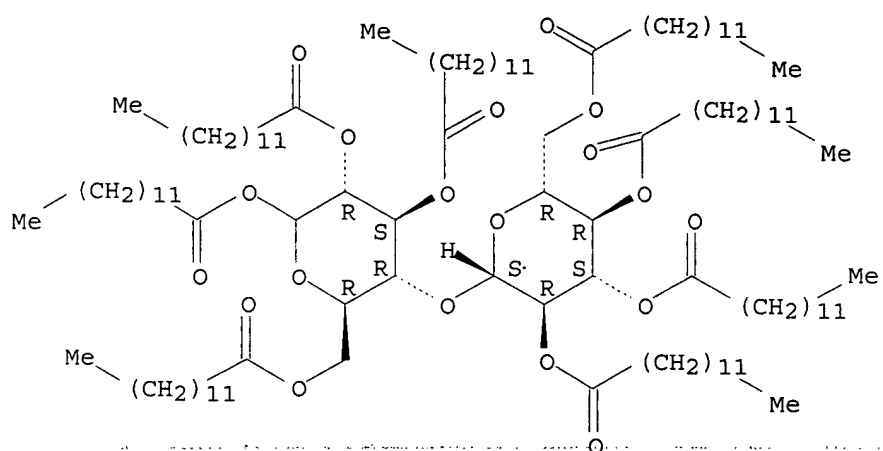


RN 143074-16-2 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxotridecyl)-.beta.-D-glucopyranosyl]-, tetratridecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

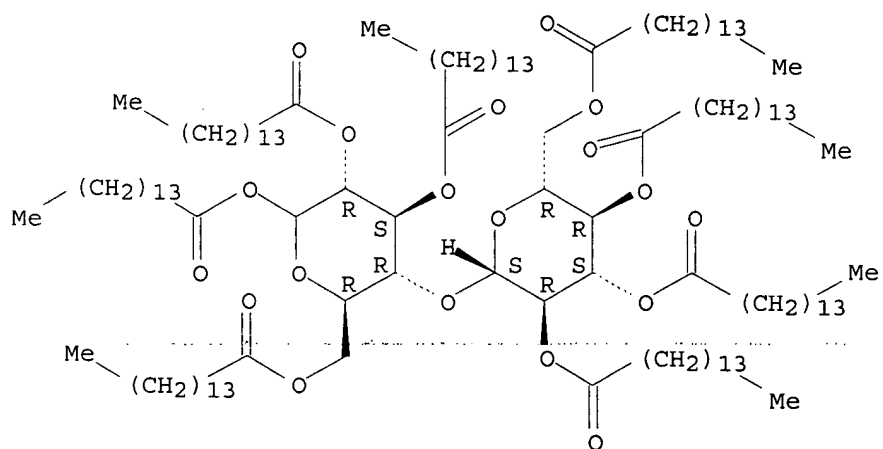
White 09/982,077



RN 143074-17-3 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxopentadecyl)-.beta.-D-glucopyranosyl]-, tetrapentadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



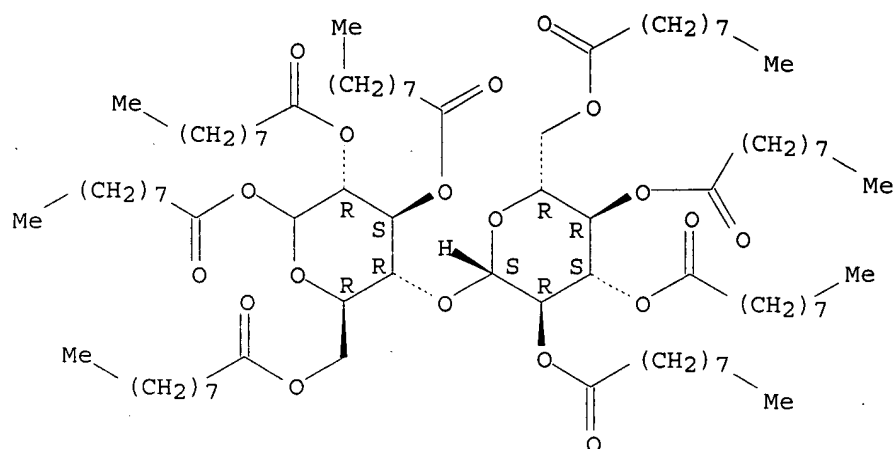
IT 143062-39-9P 144238-71-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liq. crystal, prepn. and properties of)

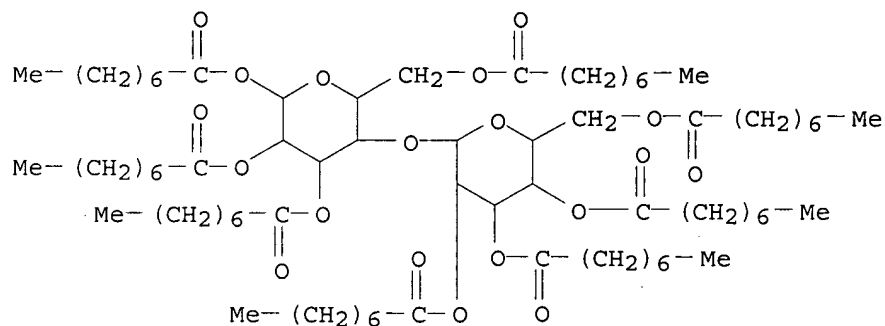
RN 143062-39-9 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

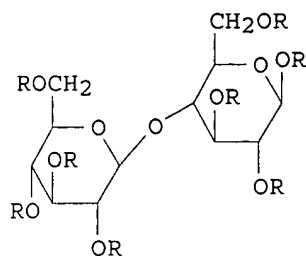
Absolute stereochemistry.



RN 144238-71-1 HCAPLUS
 CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)



L10 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1992:408310 HCAPLUS
 DOCUMENT NUMBER: 117:8310
 TITLE: Preparation of cellobiolide octa(n-alkanoate)s and their thermal properties
 AUTHOR(S): Takada, Akihiko; Itoh, Takahiro; Fukuda, Takeshi; Miyamoto, Takeaki
 CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan
 SOURCE: Bulletin of the Institute for Chemical Research, Kyoto University (1991), 69(2), 77-83
 CODEN: BICRAS; ISSN: 0023-6071
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



I

AB Cellobiose octa(n-alkanoate)s (CbOA's) I [R = CO(CH₂)_nMe, n = 4-8, 10, 12) were prep'd., and their thermal and structural properties were studied by DSC, polarization optical microscopy, and polarization IR. CbOA's with an acyl length between 6 and 14 in carbon no. were found to form a thermotropic liq. crystal. Comparison of their thermal data with those of cellulose tri(n-alkanoate)s indicated different structuring principles for the oligomer and polymer systems, consistently with the previous studies by x-ray diffraction. The polarization IR data were apparently consistent with the proposed discotic columnar structuring of CbOA mols.

CC 33-4 (Carbohydrates)

Section cross-reference(s): 75

IT 139432-92-1P 139432-93-2P 139432-94-3P
139432-95-4P 139432-96-5P 139559-65-2P
141671-23-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thermal properties as)

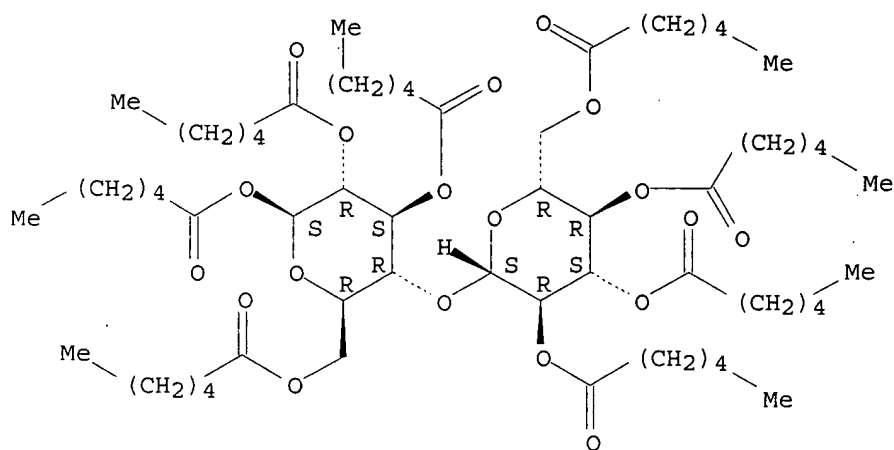
IT 139432-92-1P 139432-93-2P 139432-94-3P
139432-95-4P 139432-96-5P 139559-65-2P
141671-23-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thermal properties as)

RN 139432-92-1 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxohexyl)-.beta.-D-glucopyranosyl]-, tetrahexanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

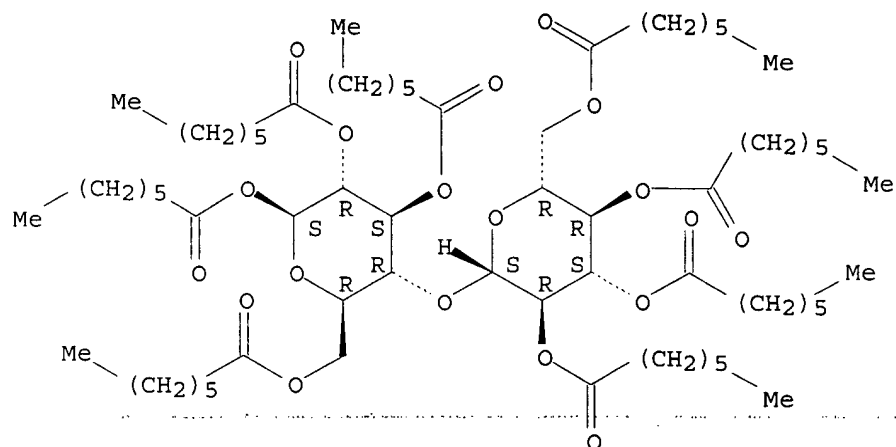


RN 139432-93-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoheptyl)-.beta.-D-

glucopyranosyl]-, tetraheptanoate (9CI) (CA INDEX NAME)

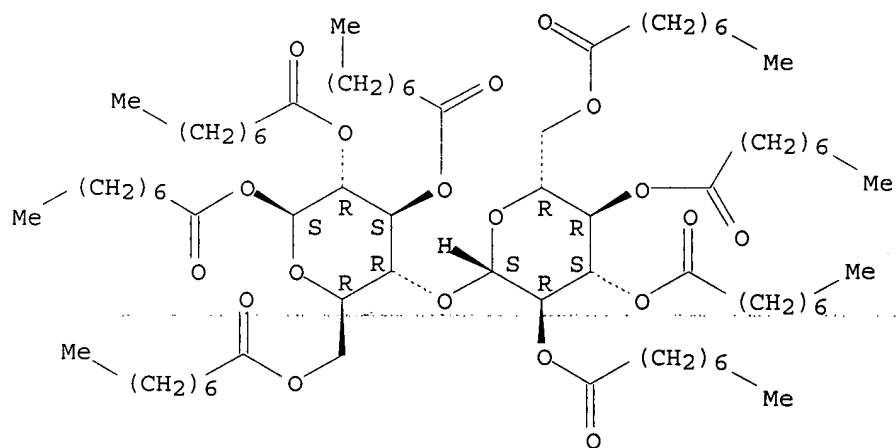
Absolute stereochemistry.



RN 139432-94-3 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

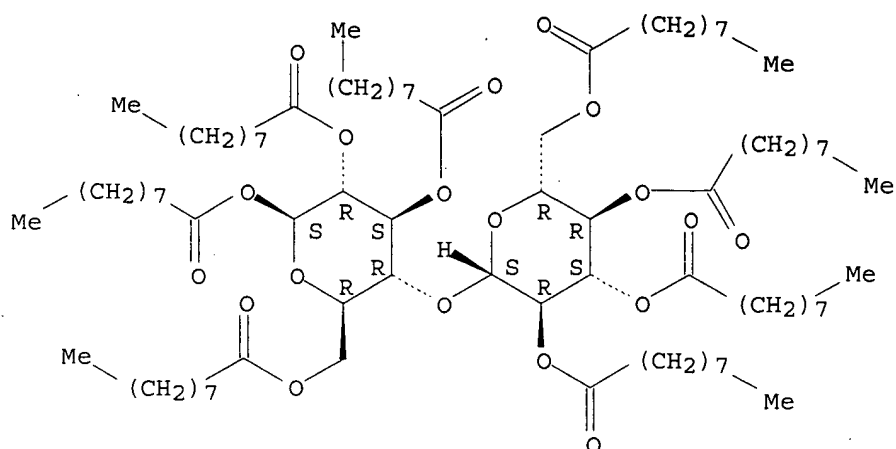
Absolute stereochemistry.



RN 139432-95-4 HCAPLUS

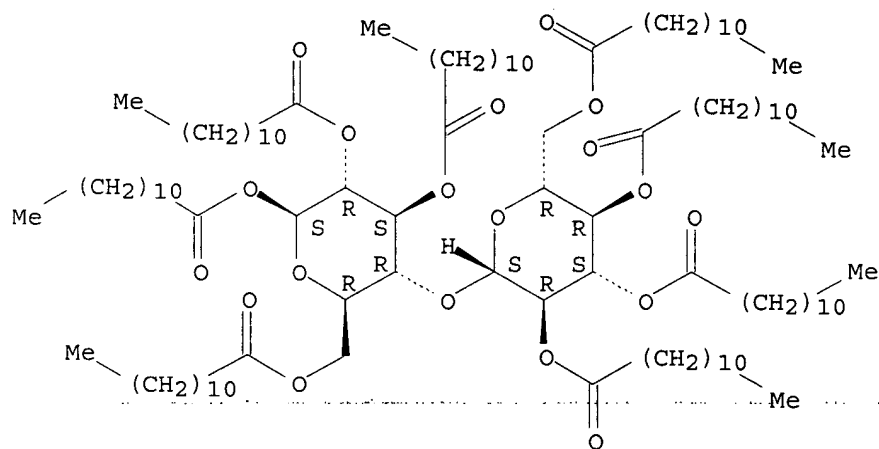
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



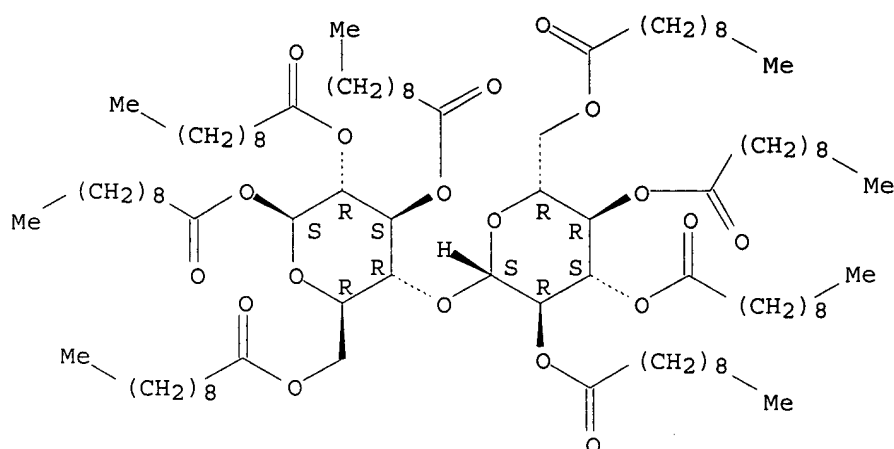
RN 139432-96-5 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



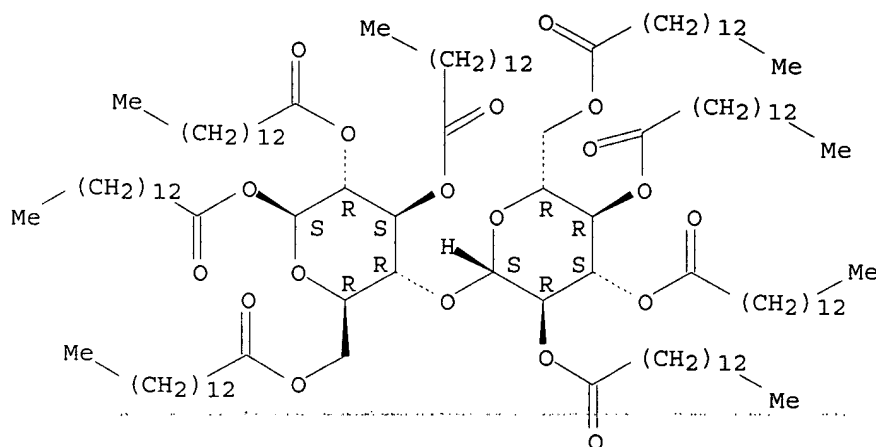
RN 139559-65-2 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 141671-23-0 HCAPLUS
 CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-.beta.-D-glucopyranosyl]-, tetratetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:163033 HCAPLUS

DOCUMENT NUMBER: 116:163033

TITLE: Thermotropic liquid crystals based on oligosaccharides
 AUTHOR(S): Fukuda, Takeshi; Sugiura, Makoto; Takada, Akihiko;
 Itoh, Takahiro; Ma, Yungdae; Minoda, Masahiko;
 Miyamoto, Takeaki

CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan

SOURCE: Sen'i Gakkaishi (1991), 47(8), 452-5

CODEN: SENGAS; ISSN: 0037-9875

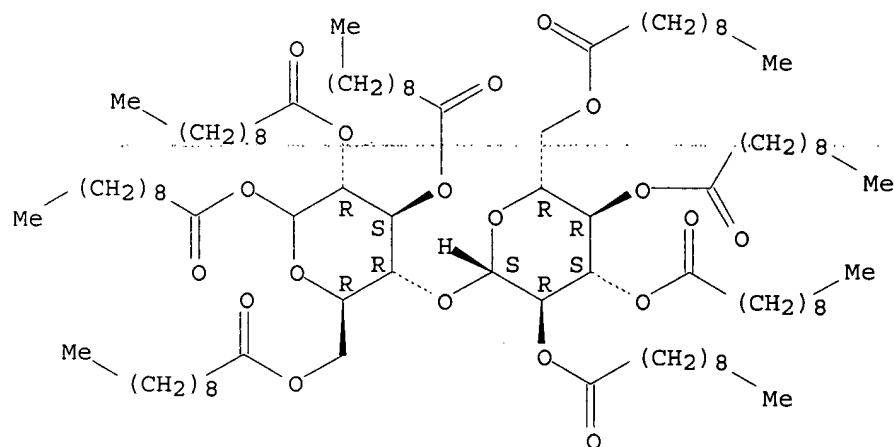
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Acylation or regio-selective alkylation of cello- and/or chito-oligosaccharides provides a new family of thermotropic liq. crystals. Some of the mesophase textures and thermal properties exhibited by these compds are presented.

CC 75-11 (Crystallography and Liquid Crystals)
 Section cross-reference(s): 33
 IT 114418-07-4 122119-57-7 122211-80-7 128940-28-3
 139953-88-1 139953-89-2 139979-75-2
 RL: PRP (Properties)
 (texture and thermal properties of)
 IT 128940-28-3
 RL: PRP (Properties)
 (texture and thermal properties of)
 RN 128940-28-3 HCAPLUS
 CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

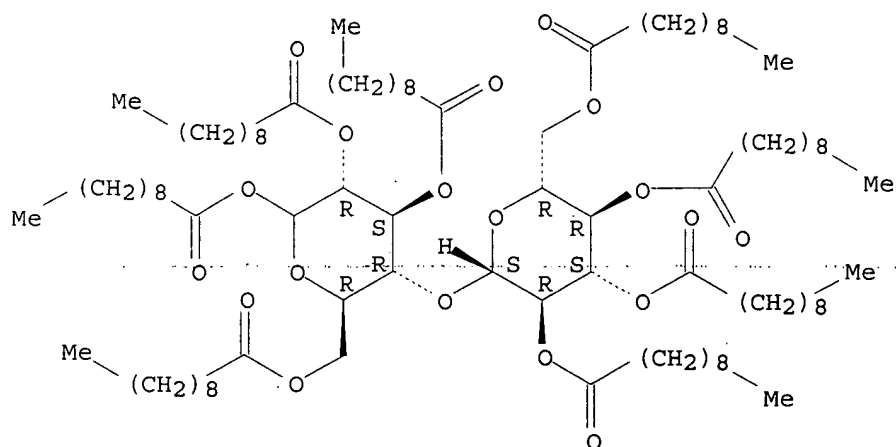
Absolute stereochemistry.



L10 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1991:196879 HCAPLUS
 DOCUMENT NUMBER: 114:196879
 TITLE: Columnar liquid crystals in oligosaccharide derivatives. I. Discotic columnar liquid crystals in cellobiose octadecanoate and cellotriose hendecadecanoate
 AUTHOR(S): Itoh, T.; Takada, A.; Fukuda, T.; Miyamoto, T.; Yakoh, Y.; Watanabe, J.
 CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Kyoto, 611, Japan
 SOURCE: Liquid Crystals (1991), 9(2), 221-8
 CODEN: LICRE6; ISSN: 0267-8292
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Cellobiose octadecanoate and celotriose hendecadecanoate were synthesized and their mesophase properties studied. Both ester derivs. show enantiotropic mesophases below 100.degree.. From the observations of microscopic texture and x-ray pattern, the mesophase is hexagonal columnar, in which the column is built up by a periodic stacking of the cellobiose or cellotriose skeleton and packed into a 2-dimensional hexagonal lattice. The mesophase is thus similar to the hexagonal ordered columnar phase in a class of discotics, indicating that cellobiose and cellotriose moieties can work as discotic mesogens.
 CC 75-11 (Crystallography and Liquid Crystals)
 Section cross-reference(s): 32
 IT 128940-28-3P 133544-34-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (liq. crystal, prepn. and discotic columnar structure of)
 IT 128940-28-3P 133544-34-0P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (liq. crystal, prepn. and discotic columnar structure of)
 RN 128940-28-3 HCAPLUS
 CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

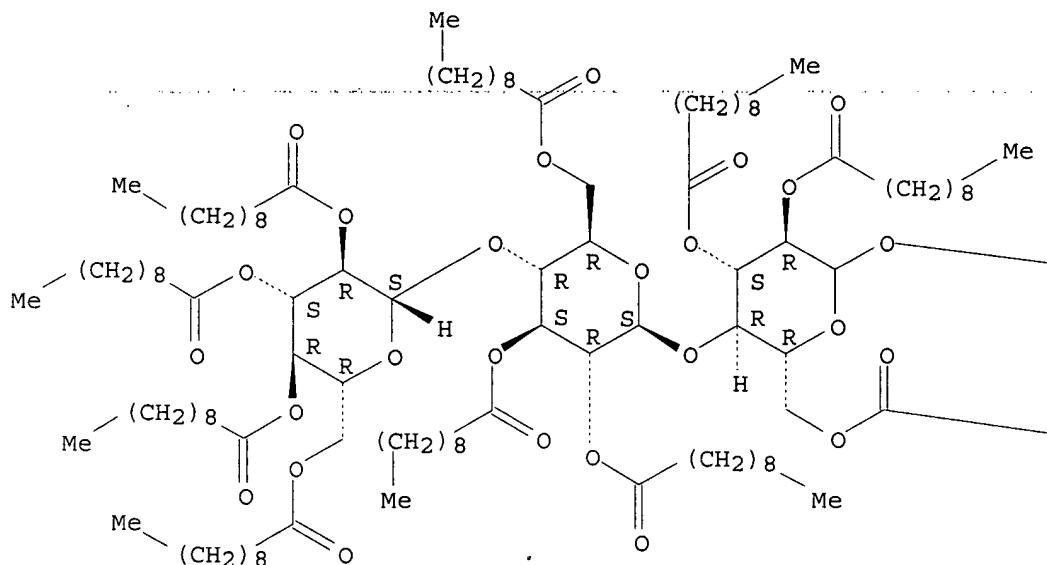
Absolute stereochemistry.

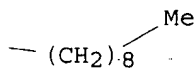
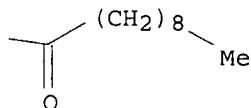


RN 133544-34-0 HCAPLUS
 CN D-Glucopyranose, 0-2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-0-2,3,6-tris-O-(1-oxodecyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



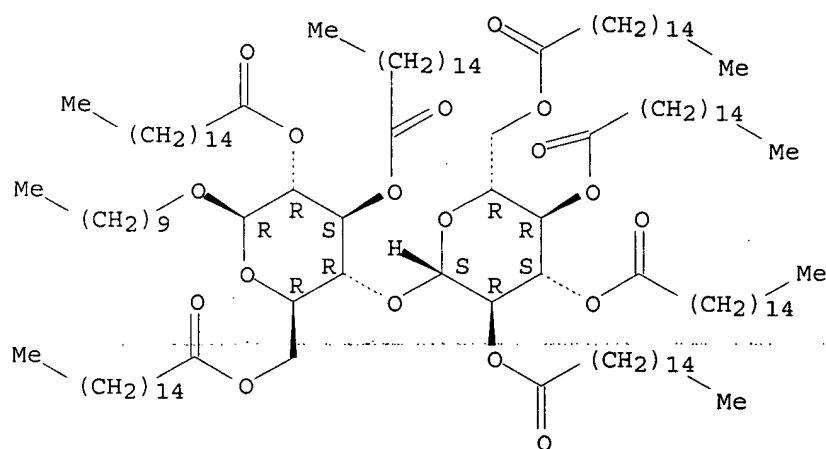


L10 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1991:60717 HCAPLUS
 DOCUMENT NUMBER: 114:60717
 TITLE: Alkyl glycoside fatty acid polyesters as fat
 substitutes
 INVENTOR(S): Winter, Daryl B.; Meyer, Richard S.; Root, Jeffrey M.;
 Campbell, Michael L.
 PATENT ASSIGNEE(S): Curtice-Burns, Inc., USA
 SOURCE: U.S., 10 pp. Cont.-in-part of U.S. 4,840,815.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4942054	A	19900717	US 1989-347264	19890503
US 4840815	A	19890620	US 1987-122188	19871118
US 4840815	B1	19970930		
WO 9013555	A1	19901115	WO 1989-US2222	19890522
W: AU, JP, SU				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8937515	A1	19901129	AU 1989-37515	19890522
WO 9013556	A1	19901115	WO 1989-US2679	19890619
W: AU, JP, SU				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8944809	A1	19901129	AU 1989-44809	19890619
EP 423246	A1	19910424	EP 1989-911975	19890619
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 04500975	T2	19920220	JP 1989-511122	19890619
CA 1330078	A1	19940607	CA 1989-603212	19890619
AU 9065476	A1	19920317	AU 1990-65476	19900822
US 5550220	A	19960827	US 1994-359942	19941220
PRIORITY APPLN. INFO.:			US 1987-49625	19870513
			US 1987-122188	19871118

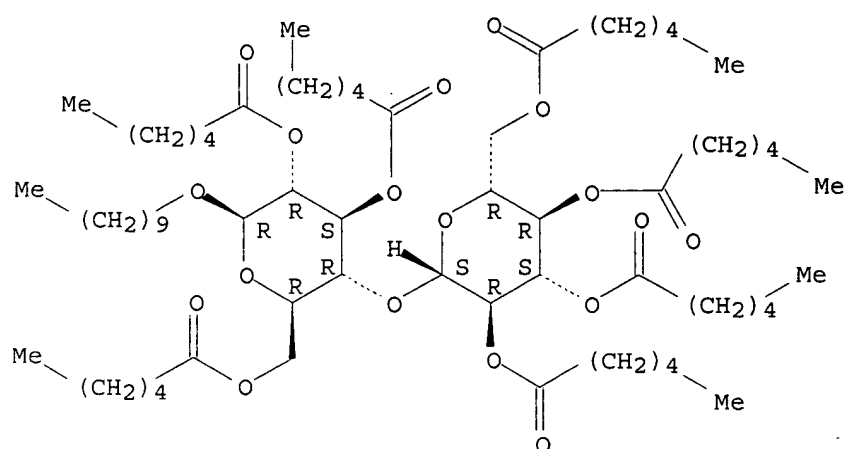
- AB (N-alkyl .beta.-D-cellobioside).hepta-n-alkanoates with varying lengths of alkyl and alkanoyl chains were synthesized via 4 steps starting with D-cellobiose octaacetate. These new compds. form a thermotropic liq.-crystal phase of smectic type when the alkyl and alkanoyl lengths are appropriate. A rather minor difference in mol. structure, e.g., an ether vs. ester linkage at the 1-O position, could bring about a considerable difference in the temp. span or the stability of the mesophase.
- CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 6
- IT 120907-49-5 129530-33-2 129530-34-3 129530-35-4
129530-36-5 129530-37-6 129530-38-7
129530-39-8 129530-40-1 129530-41-2
129530-42-3 129530-43-4 129530-44-5
129530-45-6 129555-15-3
RL: PRP (Properties)
(liq. crystal properties of)
- IT 129530-33-2 129530-35-4 129530-36-5
129530-37-6 129530-38-7 129530-39-8
129530-40-1 129530-41-2 129530-42-3
129530-43-4 129530-44-5 129530-45-6
129555-15-3
RL: PRP (Properties)
(liq. crystal properties of)
- RN 129530-33-2 HCAPLUS
- CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxohexadecyl)-
.beta.-D-glucopyranosyl]-, trihexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



- RN 129530-35-4 HCAPLUS
- CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxohexyl)-
.beta.-D-glucopyranosyl]-, trihexanoate (9CI) (CA INDEX NAME)

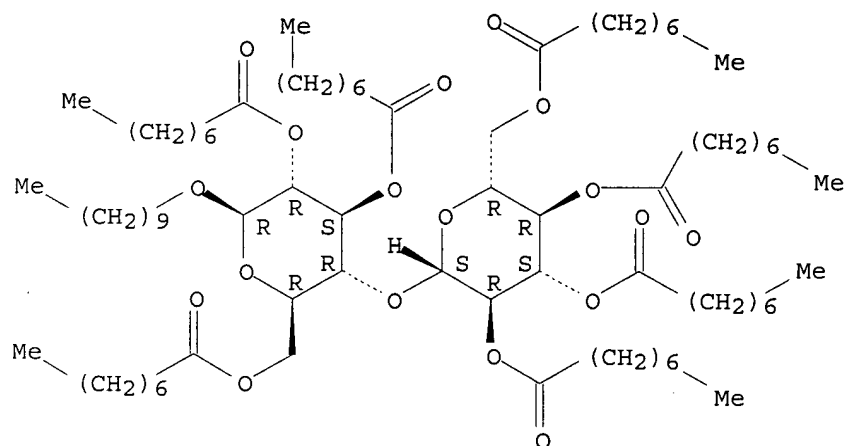
Absolute stereochemistry.



RN 129530-36-5 HCAPLUS

CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-
.beta.-D-glucopyranosyl]-, trioctanoate (9CI) (CA INDEX NAME)

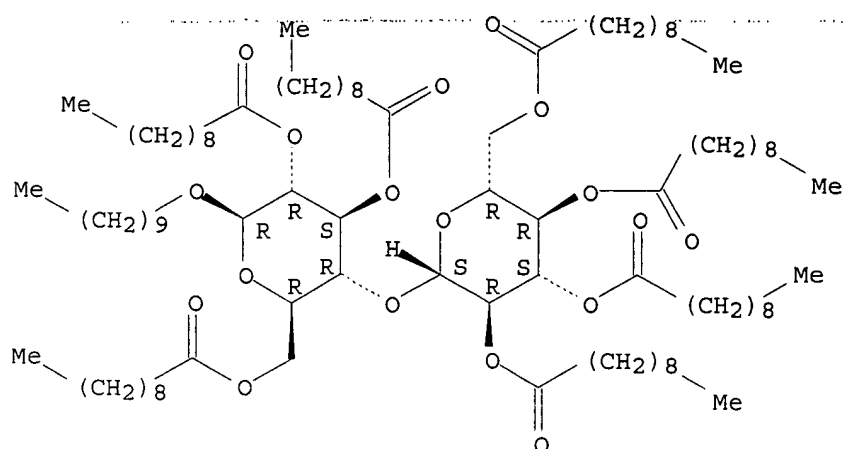
Absolute stereochemistry.



RN 129530-37-6 HCAPLUS

CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-
.beta.-D-glucopyranosyl]-, tris(decanoate) (9CI) (CA INDEX NAME)

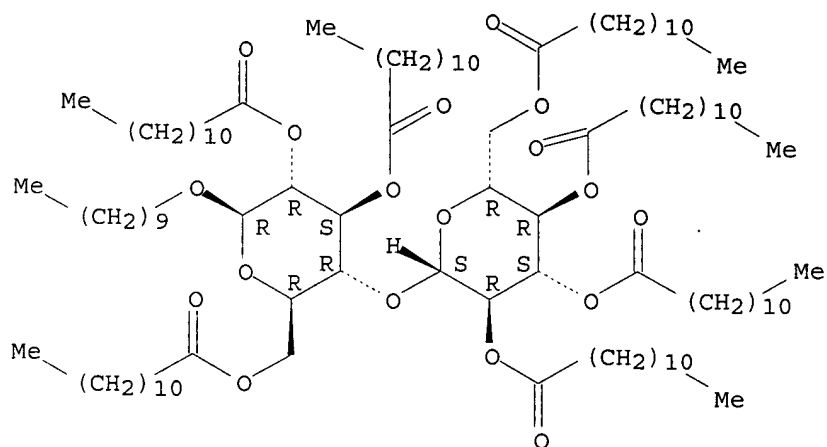
Absolute stereochemistry.



RN 129530-38-7 HCAPLUS

CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-
.beta.-D-glucopyranosyl]-, tridodecanoate (9CI) (CA INDEX NAME)

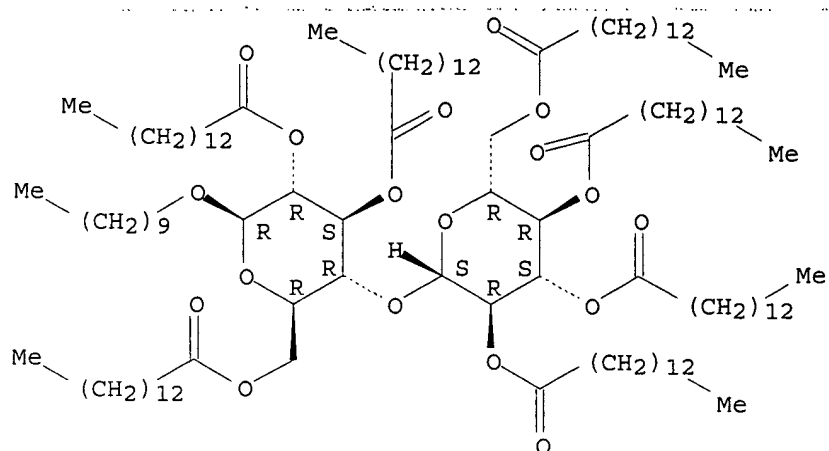
Absolute stereochemistry.



RN 129530-39-8 HCAPLUS

CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-
.beta.-D-glucopyranosyl]-, tritetradecanoate (9CI) (CA INDEX NAME)

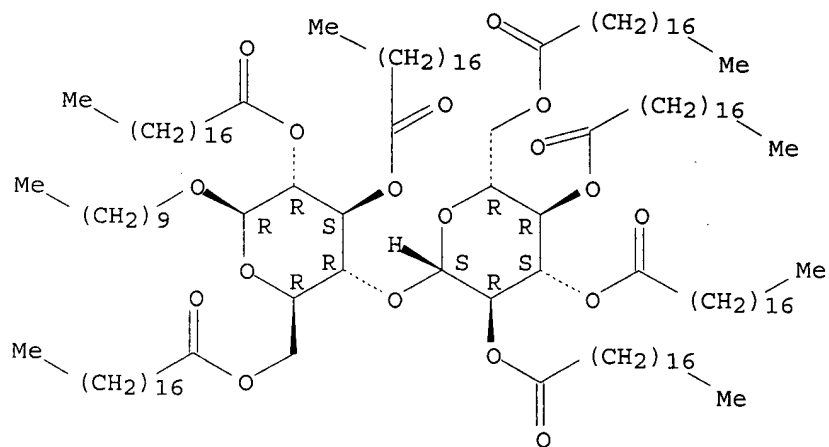
Absolute stereochemistry.



RN 129530-40-1 HCAPLUS

CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-
.beta.-D-glucopyranosyl]-, trioctadecanoate (9CI) (CA INDEX NAME)

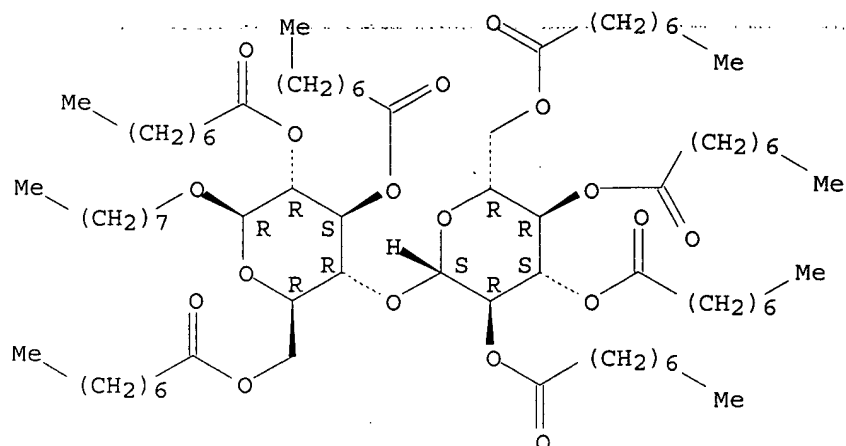
Absolute stereochemistry.



RN 129530-41-2 HCAPLUS

CN .beta.-D-Glucopyranoside, octyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-
.beta.-D-glucopyranosyl]-, trioctanoate (9CI) (CA INDEX NAME)

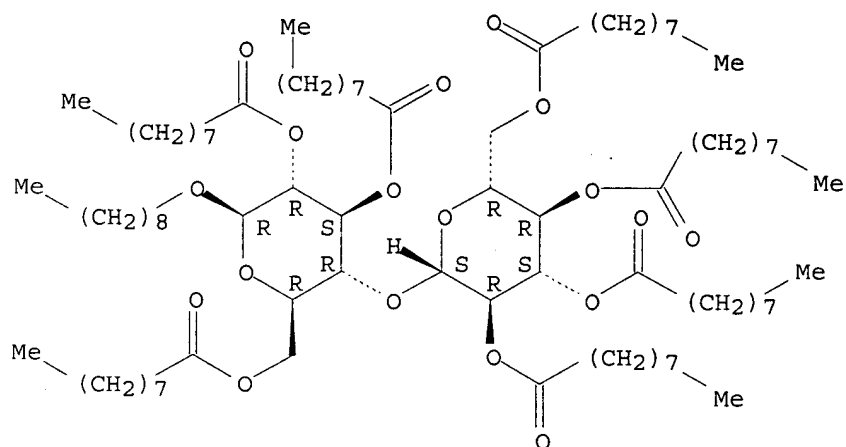
Absolute stereochemistry.



RN 129530-42-3 HCAPLUS

CN .beta.-D-Glucopyranoside, nonyl 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-
.beta.-D-glucopyranosyl]-, tridonanoate (9CI) (CA INDEX NAME)

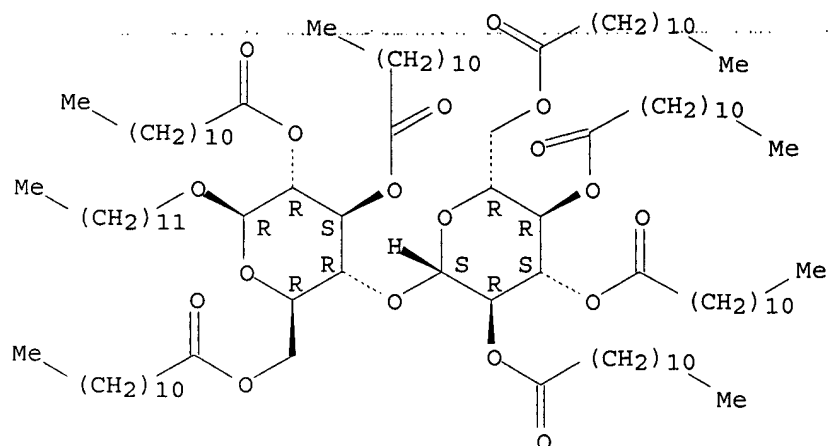
Absolute stereochemistry.



RN 129530-43-4 HCAPLUS

CN .beta.-D-Glucopyranoside, dodecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-
.beta.-D-glucopyranosyl]-, tridodecanoate (9CI) (CA INDEX NAME)

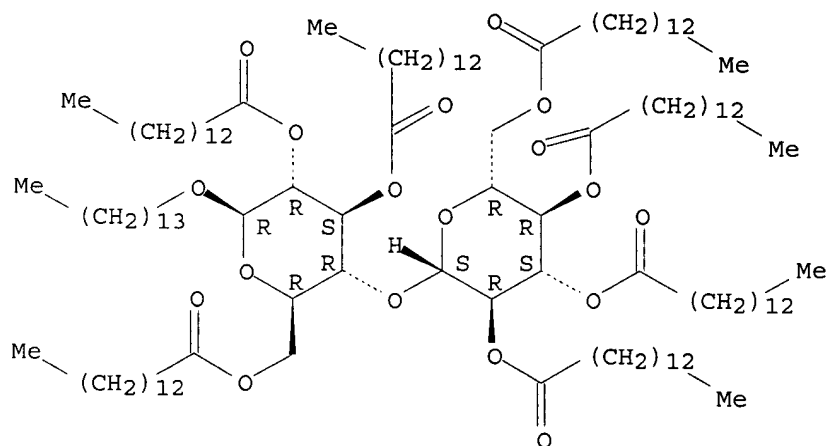
Absolute stereochemistry.



RN 129530-44-5 HCAPLUS

CN .beta.-D-Glucopyranoside, tetradecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-.beta.-D-glucopyranosyl]-, tritetradecanoate (9CI) (CA INDEX NAME)

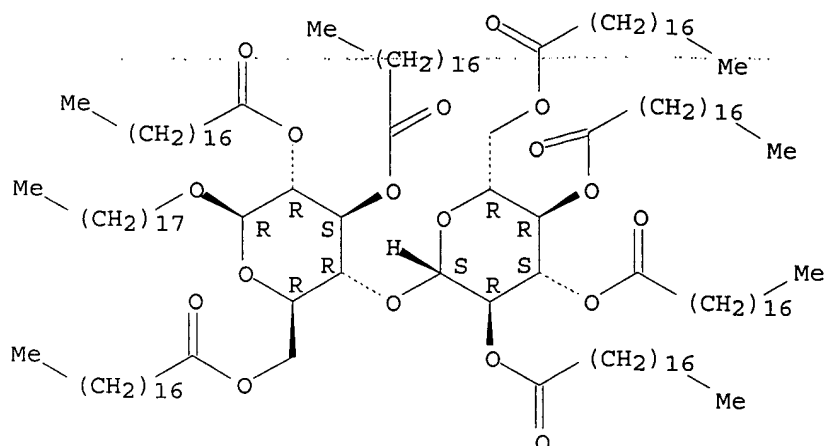
Absolute stereochemistry.



RN 129530-45-6 HCAPLUS

CN .beta.-D-Glucopyranoside, octadecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, trioctadecanoate (9CI) (CA INDEX NAME)

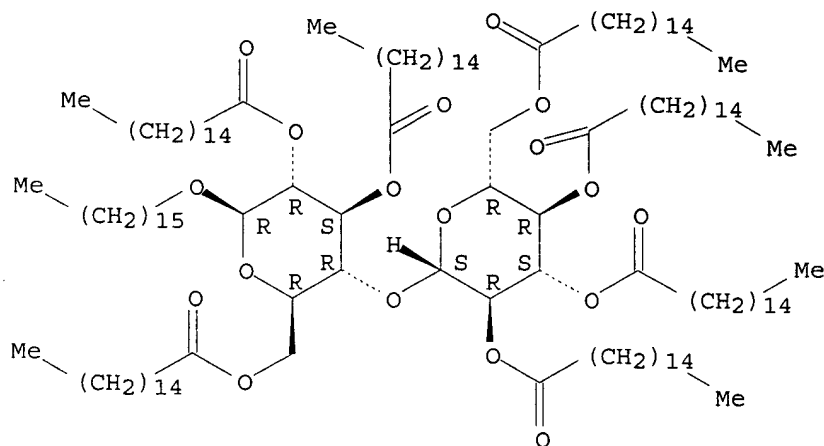
Absolute stereochemistry.



RN 129555-15-3 HCAPLUS

CN .beta.-D-Glucopyranoside, hexadecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxohexadecyl)-.beta.-D-glucopyranosyl]-, trihexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:499637 HCAPLUS

DOCUMENT NUMBER: 113:99637

TITLE: Preparation and monolayer films of cellobiose alkyl esters

AUTHOR(S): Itoh, Takahiro; Matsumoto, Mutsuo; Suzuki, Hidematsu; Miyamoto, Takeaki

CORPORATE SOURCE: Tokai Senko K. K., Kyoto, 604, Japan

SOURCE: Bulletin of the Institute for Chemical Research, Kyoto University (1990), 68(1), 53-62

CODEN: BICRAS; ISSN: 0023-6071

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cellobiose octa(decanoate) and cellobiose octa(octadecanoate) are prepd. and used for studies on formation and fine structure of monolayers at the

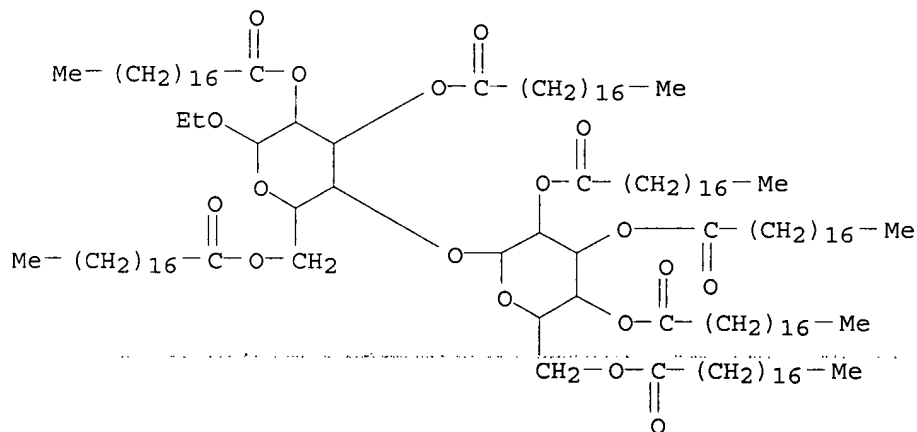
US 1989-347264 19890503
 WO 1989-US2222 19890522
 US 1989-368675 19890619
 WO 1989-US2679 19890619
 WO 1990-US4769 19900822
 US 1991-770771 19911004
 US 1992-869288 19920415

AB Alkyl glycoside fatty acid polyesters with .gtoreq.4 ester groups are used as fat substitutes for frying and as components of foods (e.g. salad dressings). Et 4'-galactosyl lactose polyoleate was prepd. by Na catalyzed inter-esterification of Et 4'-galactosyl lactose decaacetate and Me oleate. This was used as a fat substitute in salad dressings to give a product with satisfactory flavor and texture.

IC ICM A23D005-00
 NCL 426611000
 CC 17-9 (Food and Feed Chemistry)
 IT 555-44-2 39024-75-4, Sucrose octapalmitate 124450-50-6 124606-47-9
 131662-24-3
 RL: BIOL (Biological study)
 (as fat substitute in deep-frying)

IT 131662-24-3
 RL: BIOL (Biological study)
 (as fat substitute in deep-frying)

RN 131662-24-3 HCAPLUS
 CN D-Glucopyranoside, ethyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-galactopyranosyl]-, trioctadecanoate (9CI) (CA INDEX NAME)



L10 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1990:542720 HCAPLUS

DOCUMENT NUMBER: 113:142720

TITLE: Cellobiase-based liquid crystals. (n-Alkyl .beta.-D-cellobioside) hepta-n-alkanoates

AUTHOR(S): Takada, Akihiko; Ma, Yung Dae; Fukuda, Takeshi; Miyamoto, Takeaki

CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan

SOURCE: Bulletin of the Institute for Chemical Research, Kyoto University (1990), 68(1), 21-9

CODEN: BICRAS; ISSN: 0023-6071

DOCUMENT TYPE: Journal

LANGUAGE: English

air-water interface. The surface pressure (π)-area (A) isotherms of monolayers of these cellobiose esters are similar to those of the corresponding cellulose esters previously reported, when A is expressed in nm² per alkyl chain instead of per glucose unit. Under electron microscopic exams. of the monolayers transferred from the water surface, the monolayers of the two cellobiose esters are inhomogeneous. This makes a sharp contrast to the fact that the cellulose esters, considered as the polymers of these cellobiose esters, form homogeneous monolayers. These results are discussed in comparison with those of stearic acid.

CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)

Section cross-reference(s): 33

IT 128940-28-3P 128968-01-4P

RL: PREP (Preparation)

(monolayer films of, prepn. and fine structure of, at air-water interface)

IT 128940-28-3P 128968-01-4P

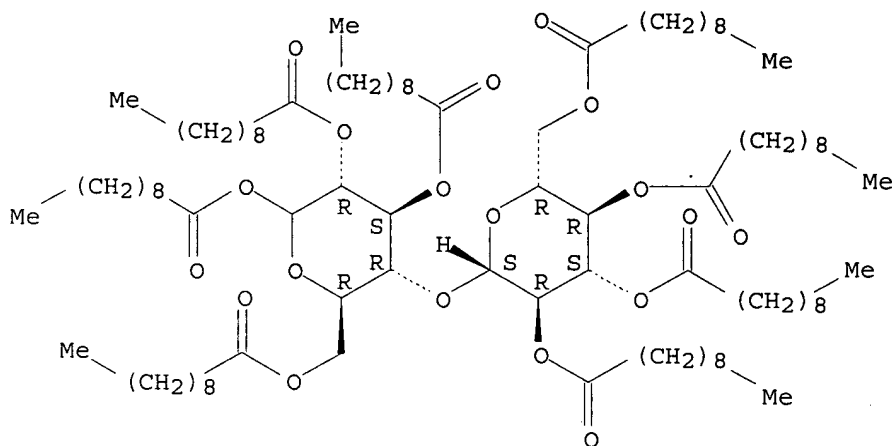
RL: PREP (Preparation)

(monolayer films of, prepn. and fine structure of, at air-water interface)

RN 128940-28-3 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

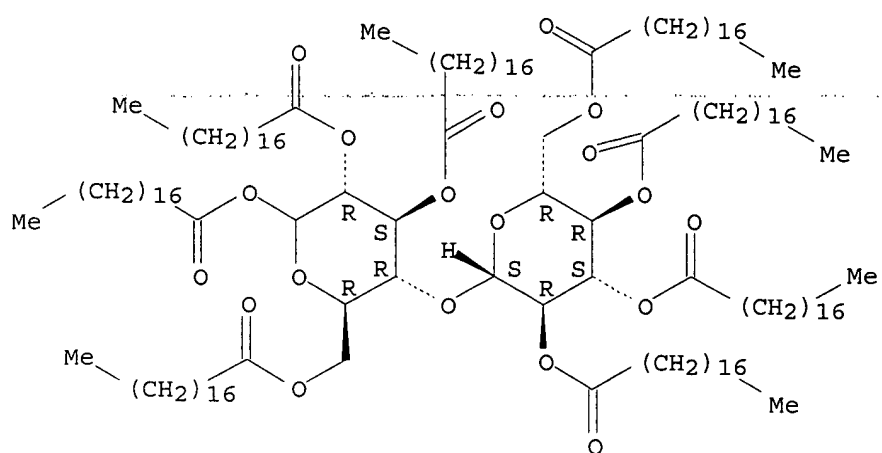
Absolute stereochemistry.



RN 128968-01-4 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d que nos 117

L1 STR
 L2 (383)SEA FILE=REGISTRY SSS FUL L1
 L3 371 SEA FILE=REGISTRY ABB=ON PLU=ON L2/COMP
 L4 STR
 L5 STR
 L6 (383)SEA FILE=REGISTRY SSS FUL L5
 L7 (371)SEA FILE=REGISTRY ABB=ON PLU=ON L6/COMP
 L8 102 SEA FILE=REGISTRY SUB=L7 SSS FUL L4
 L9 175 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
 L10 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L8
 L11 107079 SEA FILE=HCAPLUS ABB=ON PLU=ON COSMET?/OBI OR 62/SX,SC
 L12 147 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 NOT L10
 L13 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND L11
 L14 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND 63/SX,SC
 L15 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 OR L13
 L16 439726 SEA FILE=HCAPLUS ABB=ON PLU=ON CREAM OR LOTION OR OINTMENT#
 OR TOPICAL OR WATER (3A) IMMISCIB? OR GELLANT? OR ANTIPERSP?
 OR EMULSION OR SKIN
 L17 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 AND L15

=> d .ca hitstr 117 1-3

L17 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2001:279402 HCAPLUS
 DOCUMENT NUMBER: 134:300637
 TITLE: Use of DHEA or its precursors and metabolites as
 skin depigmentation agents
 INVENTOR(S): De, Lacharriere Oliver; Nouveau, Stephanie
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 10 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1092423	A2	20010418	EP 2000-118605	20000828
EP 1092423	A3	20010829		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2799645	A1	20010420	FR 1999-12773	19991013
JP 2001131072	A2	20010515	JP 2000-303977	20001003
WO 2001026618	A2	20010419	WO 2000-FR2879	20001013
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2803514	A1	20010713	FR 2000-13184	20001013
EP 1221933	A2	20020717	EP 2000-968050	20001013
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL

PRIORITY APPLN. INFO.:

FR 1999-12773 A 19991013

WO 2000-FR2879 W 20001013

- AB DHEA (dehydroepiandrosterone) or its precursors and metabolites as **skin** depigmentation agents. A cosmetic compn. contained DHEA 2, propylene glycol isostearate 13, polyethylene glycol 5, propylene glycol 3, pentyleneglycol 3, glyceryl stearate and polyethylene glycol stearate 5, ethoxylated sorbitan monostearate 0.5, ethoxylated cetyl alc. 1, gelling agents 0.5, C12-15 alkyl benzoate 4, ethanol 3, sodium hydroxide 0.12, preservatives 0.7, and water q.s. 100%. Depigmentation activity of the compn. was tested in 55-70 yr volunteers.
- IC ICM A61K007-48
ICS A61P017-12
- CC 62-4 (Essential Oils and Cosmetics)
- ST DHEA metabolite **skin** depigmentation **cosmetic**
- IT **Skin**, disease
(depigmentation; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(derivs.; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT Licorice (Glycyrrhiza)
Mulberry
Scutellaria
(ext.; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hydroxy; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxo; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT **Cosmetics**
(**skin**-lightening; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT **Cosmetics**
Sunscreens
(use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT Polysiloxanes, biological studies
Retinoids
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT 9028-35-7, HMG-CoA reductase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)
- IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 53-43-0, DHEA 57-88-5, Cholesterol, biological studies 63-05-8, 4-Androstene-3-17 dione 68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, Salicylic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological

studies 87-69-4, Tartaric acid, biological studies 90-64-2, Mandelic acid 120-46-7D, Dibenzoylmethane, derivs. 123-31-9, Hydroquinone, biological studies 131-57-7, 2-Hydroxy 4 methoxybenzophenone 145-13-1, Pregnenolone 387-79-1, 17-Hydroxypregnenolone 476-66-4, Ellagic acid 497-76-7D, Arbutine, derivs. 501-30-4, Kojic acid 521-17-5, 5 Androstenediol 551-48-9, Dhea sulfate 4065-45-6, 2-Hydroxy-4-methoxybenzophenone 5 sulfonic acid 6197-30-4, Octocrylene 6915-15-7, Malic acid 7159-95-7 10380-41-3D, 2-Cyano-3,3-diphenylacrylic acid, alkyl derivs. 15087-24-8, Benzylidene camphor 16397-78-7, 2-Ethyl hexyl cinnamate 19771-63-2, Procysteine 19771-63-2D, Procysteine, esters 25654-87-9 27503-81-7, 2-Phenylbenzimidazole 5 sulfonic acid 27598-85-2D, Aminophenol, derivs. 28901-70-4, 17.alpha.-Hydroxypregnenolone sulfate 36861-47-9 63250-25-9, 4-(Isopropyl)dibenzoylmethane 70356-09-1 88122-99-0 155633-54-8 189746-43-8 220717-78-2 **334658-18-3**

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(use of DHEA or its precursors and metabolites as skin depigmentation agents)

IT **334658-18-3**

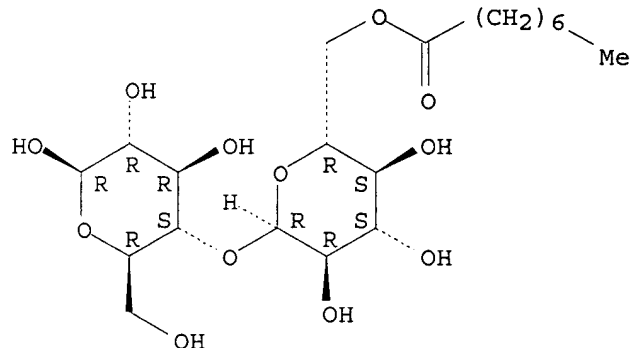
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(use of DHEA or its precursors and metabolites as skin depigmentation agents)

RN **334658-18-3** HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[6-O-(1-oxooctyl)-.alpha.-D-glucopyranosyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:81485 HCAPLUS

DOCUMENT NUMBER: 124:146725

TITLE: Preparation of glycosides of 1-(hydroxyalkoxyphenyl)-1,3-propanedione derivatives as UV-absorbing agents and topical skin protectant containing them

INVENTOR(S): Kato, Mikiko; Matsushita, Yasushi; Okazaki, Tomomi

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho

CODEN: JKXXAF

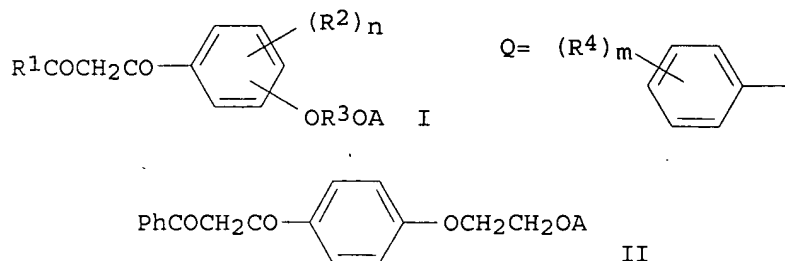
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07242693	A2	19950919	JP 1994-64639	19940307
OTHER SOURCE(S):		MARPAT 124:146725		
GI				



- AB The title compds. [I; R1 = linear or branched and (un)satd. C1-8 alkyl, Q; R2, R4 = H, OH, C1-8 alkyl or alkoxy; n, m = 1-3; R3 =alkylene; A = group residue derived by removing 1 HO group for a sugar], which have excellent UV-absorbing property and high soly. in the polar solvent phase, are prepd. Thus, p-hydroxyacetophenone was alkylated by 2-chloroethanol in the presence of K2CO3 in DMF at 80.degree. for 3 h to give 4-(2-hydroxyethoxy)acetophenone which was condensed with Me benzoate in the presence of NaH in DMF at 20.degree. for 15 min and 50.degree. for 3 h to give 3-phenyl-1,3-propanedione deriv. (II; A = H). The latter compd. was glycosidated by peracetylmaltose in the presence of phosphomolybdic acid n-hydrate in diethylene glycol di-Bu ether at 95.degree. and 12 mmHg to give the peracetylmaltoside II (A = peracetylmaltosyl) which was treated with NaOMe in MeOH at room temp. for 5 h and neutralized with Amberlite IR120B to give the title compd. II (A = maltosyl). A skin care liq. contg. the latter compd. showed excellent skin protection against sunburn for male female panelists in a beach and gave neither skin itchiness nor rash.
- IC ICM C07H015-18
ICS A61K007-00; A61K007-42; A61K007-48; A61K031-70; C09K003-00
- CC 33-3 (Carbohydrates)
Section cross-reference(s): 62
- ST glycoside hydroxyalkoxyphenylpropanedione prepn UV absorbing agent;
topical skin protectant
- IT **Cosmetics**
Ultraviolet radiation
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as UV-absorbing agents and topical skin protectant contg. them)
- IT 173060-97-4P 173060-98-5P 173060-99-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as UV-absorbing agents and topical skin protectant contg. them)
- IT 99-93-4, p-Hydroxyacetophenone 107-07-3, 2-Chloroethanol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as

UV-absorbing agents and **topical skin protectant**
contg. them)

IT 75-97-8P, 3,3-Dimethyl-2-butanone 83-87-4P, Peracetylglucose 93-58-3P,
Methyl benzoate 617-05-0P, Ethyl 3-methoxy-4-hydroxybenzoate
20880-60-8P 91555-86-1P, Ethyl 3-methoxy-4-(2-hydroxyethoxy)benzoate
99215-51-7P, 4-(2-Hydroxyethoxy)acetophenone 173061-00-2P 173061-01-3P
173061-02-4P **173061-03-5P** 173061-04-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as
UV-absorbing agents and **topical skin protectant**
contg. them)

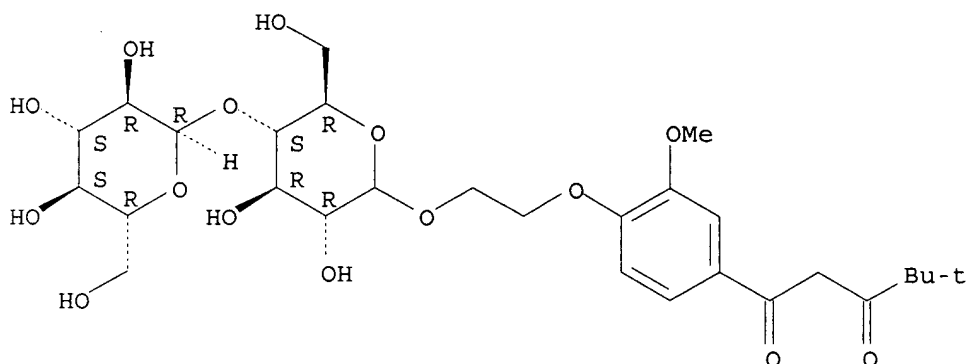
IT **173060-98-5P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as
UV-absorbing agents and **topical skin protectant**
contg. them)

RN 173060-98-5 HCAPLUS

CN 1,3-Pentanedione, 1-[4-[2-[(4-O-.alpha.-D-glucopyranosyl-D-
glucopyranosyl)oxy]ethoxy]-3-methoxyphenyl]-4,4-dimethyl- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



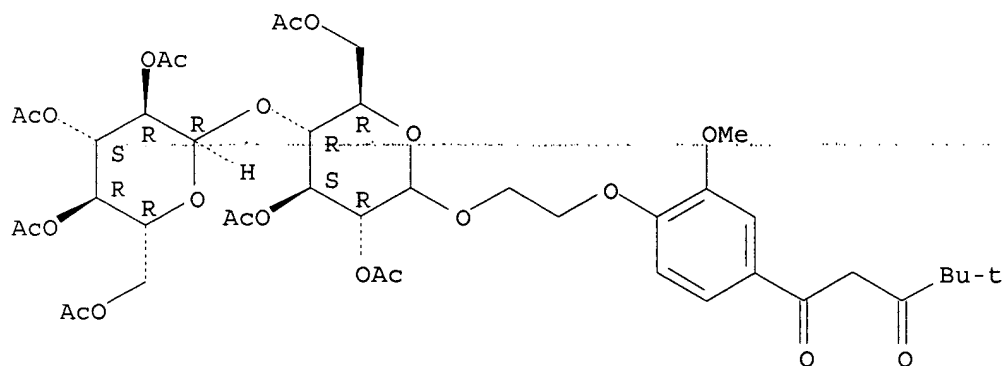
IT **173061-03-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as
UV-absorbing agents and **topical skin protectant**
contg. them)

RN 173061-03-5 HCAPLUS

CN 1,3-Pentanedione, 1-[3-methoxy-4-[2-[[2,3,6-tri-O-acetyl-4-O-(2,3,4,6-
tetra-O-acetyl-.alpha.-D-glucopyranosyl)-D-glucopyranosyl]oxy]ethoxy]phenyl
]-4,4-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:121101 HCAPLUS

DOCUMENT NUMBER: 110:121101

TITLE: Skin conditioners containing alkanolamides and amino alcohols

INVENTOR(S): Yano, Shinji; Kawamata, Akira; Minematsu, Yoshihiro; Akazaki, Shuichi; Zama, Mitsuko; Imokawa, Genji; Takaishi, Naotake; Ohtomo, Tsuyoshi; Komori, Takashi

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Eur. Pat. Appl., 53 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 282816	A2	19880921	EP 1988-103177	19880302
EP 282816	A3	19910403		
EP 282816	B1	19930915		
R: DE, ES, FR, GB, IT				
JP 63216812	A2	19880909	JP 1987-51276	19870306
JP 06092293	B4	19941116		
JP 63218609	A2	19880912	JP 1987-53769	19870309
JP 06092294	B4	19941116		
JP 63222107	A2	19880916	JP 1987-56049	19870311
JP 06092295	B4	19941116		
JP 63227513	A2	19880921	JP 1987-60718	19870316
JP 06092296	B4	19941116		
JP 63227514	A2	19880921	JP 1987-60719	19870316
JP 06092297	B4	19941116		
JP 63297309	A2	19881205	JP 1987-132054	19870528
JP 06092298	B4	19941116		
JP 01009905	A2	19890113	JP 1987-163682	19870630
JP 06069930	B4	19940907		
JP 01009906	A2	19890113	JP 1987-163683	19870630
JP 06069931	B4	19940907		
JP 01009907	A2	19890113	JP 1987-163685	19870630
JP 06069932	B4	19940907		
EP 534286	A1	19930331	EP 1992-115766	19880302
EP 534286	B1	19950802		
R: DE, ES, FR, GB, IT				

ES 2077948	T3	19951201	ES 1992-115766	19880302
US 4985547	A	19910115	US 1988-163835	19880303
JP 01079195	A2	19890324	JP 1988-133426	19880531
US 5028416	A	19910702	US 1990-546276	19900629
US 5071971	A	19911210	US 1990-584739	19900919

PRIORITY APPLN. INFO.:

	JP 1987-51276	19870306
	JP 1987-53769	19870309
	JP 1987-56049	19870311
	JP 1987-60718	19870316
	JP 1987-60719	19870316
	JP 1987-132054	19870528
	JP 1987-138727	19870602
	JP 1987-163682	19870630
	JP 1987-163683	19870630
	JP 1987-163685	19870630
	US 1988-163835	19880303

OTHER SOURCE(S): MARPAT 110:121101

AB **Skin-care cosmetics** contain fatty alkanolamides or amino alcs. The alkanolamides comprise R1CONACH2B [I; R1 = aliph. hydrocarbyl; A = (CH2)1H (1 = 3-6); CX1X2CHX3OH (X1-X3 = H, alkyl, hydroxyalkyl); (CH2CH2O)mH (m = 1, 2); CHR2CO2Y (Y = H, alkali metal; R2 = H, Me, PhCH2, Me2CH, Me2CHCH2, EtMeCHCH2, HOCH2, MeCH(OH), MeSCH2CH2, YO2CCH2CH2, 4-HOC6H4CH2, imidazol-4-ylmethyl, indol-3-ylmethyl, CH2CH2OR3 where R3 = sugar residue, P(O)(O-)OCH2CH2N+Z1Z2Z3 where Z1-Z3 = H, alkyl, aralkyl); B = CH(OR4)CH2OR5 (R4 = H, sugar residue, P(O)(O-)CH2CH2N+Z1Z2Z3, (CH2CH2O)nH where n = .gtoreq.1; R5 = aliph. hydrocarbyl, CHOHR5; with the proviso that X1-X3 and R4 may not be H the same time]. The amino alcs. comprise R6OCH2CH(OH)CH2NR8CH2CH(OH)CH2OR7 (II; R6, R7 = aliph. hydrocarbyl; R8 = CH2CH2OH, CH2CO2H, Ac). Several I are prepd. The cosmetics presented here enhance the moisture-retaining ability of the **skin** and relieve roughness of the **skin**. II were applied to rough **skin** for 2 wk and **skin** roughness was scored from 0 (no roughness) to 5 (severely rough **skin**); the score was 0.9 for II (R6 = R7 = n-C18H37, R6 = CH2CH2OH) (III) alone, 0.1-0.7 for III when incorporated in a formulations. An **emulsion** type cosmetic foundation contained III 3.0, stearic acid 5.0, cetostearyl alc. 1.0, jojoba oil 15.0, glycerol monostearate 2.0, propylene glycol monolaurate 3.0, propylene glycol 4.0, triethanolamine 1.2, methylparaben 0.3, perfume 0.1, TiO2 8.0, talc 4.0, Fe oxide 0.5, and H2O to 100% by wt.

IC ICM A61K007-48

CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 23, 33

ST **skin** conditioner alkanolamide amino alc

IT Alcohols, biological studies
RL: BIOL (Biological study)
(amino, **skin** conditioning **cosmetics** contg.)

IT **Cosmetics**
(conditioners, contg. alkanolamide derivs. and alkanolamine derivs.)

IT Amides, biological studies
RL: BIOL (Biological study)
(N,N-bis(hydroxyalkyl), **skin**-conditioning **cosmetics** contg.)

IT 119094-10-9P 119094-12-1P 119094-13-2P 119094-16-5P
119094-23-4P 119094-24-5P 119094-25-6P 119094-27-8P 119094-28-9P
119094-31-4P
RL: PREP (Preparation)
(prepn. of, as **skin** conditioner)

IT 65212-53-5 119093-57-1 119093-58-2 119093-59-3 119093-60-6
119093-61-7 119093-62-8 119093-63-9 119093-64-0 119093-65-1
119093-66-2 119093-67-3 119093-68-4 119093-69-5 119093-70-8

White 09/982,077

119093-71-9	119093-72-0	119093-73-1	119093-74-2	119093-75-3
119093-76-4	119093-77-5	119093-78-6	119093-79-7	119093-80-0
119093-81-1	119093-82-2	119093-83-3	119093-84-4	119093-85-5
119093-86-6	119093-87-7	119093-88-8	119093-89-9	119093-90-2
119093-91-3	119093-92-4	119093-93-5	119093-94-6	119093-95-7
119093-96-8	119093-97-9	119093-98-0	119093-99-1	119094-00-7
119094-01-8	119094-02-9	119094-03-0	119094-04-1	119094-05-2
119094-06-3	119094-07-4	119094-08-5	119094-09-6	119135-32-9
119135-33-0	119135-34-1	119135-35-2	119135-36-3	

RL: BIOL (Biological study)

(skin conditioning cosmetics contg.)

IT 119094-13-2P

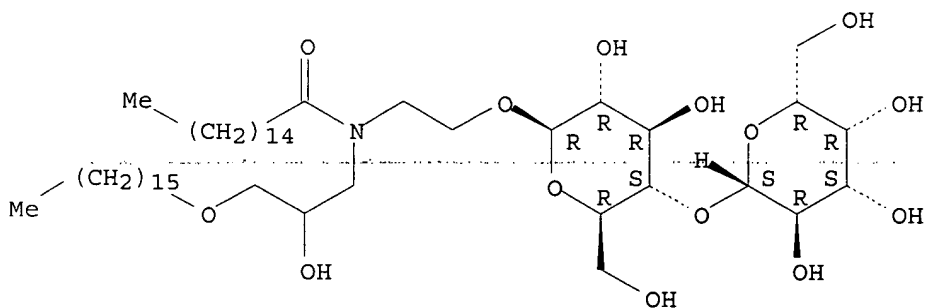
RL: PREP (Preparation)

(prepn. of, as skin conditioner)

RN 119094-13-2 HCAPLUS

CN Hexadecanamide, N-[2-[(4-O-.beta.-D-galactopyranosyl-.beta.-D-glucopyranosyl)oxy]ethyl]-N-[3-(hexadecyloxy)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> fil wpids

~~FILE 'WPIDS'~~ ENTERED AT 10:19:15 ON 18 NOV 2002
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FILE LAST UPDATED: 13 NOV 2002 <20021113/UP>
MOST RECENT DERWENT UPDATE: 200273 <200273/DW>
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GUIDES, PLEASE VISIT:
http://www.derwent.com/userguides/dwpi_guide.html <<<

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(FILE 'WPIDS' ENTERED AT 10:13:17 ON 18 NOV 2002)

DEL HIS Y

L1 445 S CELLOBIOSE
L2 1 S L1 (4A) ACYLAT?
L3 10 S L1 (4A) (ACYL? OR ACETYL?)
L4 10 S L3 OR L2
L5 10 S L1 (7A) (ACYL OR ACETYL OR ACETYLAT? OR ACYLAT?)
L6 10 S L5 OR L2
L7 1 S HEPTADECANOAT? (S) L1
L8 10 S L7 OR L6

FILE 'WPIDS' ENTERED AT 10:19:15 ON 18 NOV 2002

=> d que 18

L1 445 SEA FILE=WPIDS ABB=ON PLU=ON CELLOBIOSE
L2 1 SEA FILE=WPIDS ABB=ON PLU=ON L1 (4A) ACYLAT?
L5 10 SEA FILE=WPIDS ABB=ON PLU=ON L1 (7A) (ACYL OR ACETYL OR
ACETYLAT? OR ACYLAT?)
L6 10 SEA FILE=WPIDS ABB=ON PLU=ON L5 OR L2
L7 1 SEA FILE=WPIDS ABB=ON PLU=ON HEPTADECANOAT? (S) L1
L8 10 SEA FILE=WPIDS ABB=ON PLU=ON L7 OR L6

=> d .wp 1-10

L8 ANSWER 1 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 2002-426445 [45] WPIDS
DNC C2002-120917
TI New **acylated cellobiose** useful as structurant or
thickener for water-immiscible carrier liquid in e.g. cosmetic
formulations.
DC D21 E13
IN FRANKLIN, K R; HOPKINSON, A; WEBB, N; WHITE, M S
PA (UNIL) UNILEVER HOME & PERSONAL CARE USA DIV CO; (UNIL) HINDUSTAN LEVER
LTD; (UNIL) UNILEVER NV; (UNIL) UNILEVER PLC

CYC 97

PI WO 2002032914 A2 20020425 (200245)* EN 94p

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

US 2002072506 A1 20020613 (200246)

AU 2001093827 A 20020429 (200255)

ADT WO 2002032914 A2 WO 2001-EP10869 20010918; US 2002072506 A1 US 2001-982077
20011017; AU 2001093827 A AU 2001-93827 20010918

FDT AU 2001093827 A Based on WO 200232914

PRAI GB 2000-25437 20001017

AB WO 200232914 A UPAB: 20020717

NOVELTY - **Acylated cellobiose** (I) is new.

DETAILED DESCRIPTION - An **acylated cellobiose** of formula (I) is new.

X = acyl, -R-CO- or H;

Z = acyl, R'-CO- or H.

Not more than a minority of R + R' residues represent H. In the remaining R + R' residues, R is 5-31C hydrocarbon residue, and R' is an optionally substituted aromatic hydrocarbon residue, 1-31C hydrocarbon residue or cycloaliphatic hydrocarbon residue.

INDEPENDENT CLAIMS are included for the following:

(a) A method of preparing **acylated cellobiose**

(I); and

(b) A method of thickening or structuring a water-immiscible liquid to form a cream, soft solid or solid composition. The water-immiscible liquid is thickened or structured by forming a solution of a gellant in the liquid at a temperature above its gelling temperature. The resulting solution is then cooled to and maintained at below its gelling temperature until its viscosity has increased, or until it has solidified. The gellant comprises **acylated cellobiose** (I).

USE - Structurant or thickener for a water-immiscible carrier liquid, e.g. a phase in a cosmetic formulation such as antiperspirant or deodorant formulations, especially transparent or translucent water-in-oil emulsions.

ADVANTAGE - (I) increases storage stability and resistance against in situ crystallization of cosmetic compositions.
Dwg.0/0

TECH UPTX: 20020717

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation (claimed): (I) is prepared by reacting an **acylated cellobiose** of formula (II) with an **acylating** agent containing the residue R' at the anomeric carbon.

Preferred Compound: The **acylated cellobiose** may be **cellobiose**, **heptanonoate**, **monobenzoate**, **mononaphthanoate**, **monodecanoate**, **monododecanoate**, **monoeleostearate**, **monostearate**, **monooleate**, **monocyclohexanoate**, or **cellobiose** **heptadecanoate**, **monobenzoate**, **monobiphenyloate**, **monoethanoate** or **monocyclohexanoate**.

Preferred Composition: The major fraction (preferably at least 90%) of the **acylated cellobiose** is alpha-anomer or beta-anomer. The gellant is present in the cream, soft solid or solid composition at 0.5-15 wt.%. The cream, soft solid or solid composition further includes active agent(s) consisting of skin benefit agents, personal care agents, medicaments, sunscreen or tanning aid. The personal care agent comprises an antiperspirant or a deodorant. The active agent may include antiperspirant salt comprising an aluminum salt or an aluminum and zirconium salt (preferably aluminum chlorohydrate, aluminum/zirconium

chlorohydrate or a complex of aluminum and zirconium chlorohydrate with glycine).

L8 ANSWER 2 OF 10 WPIDS (C) 2002 THOMSON DERWENT
 AN 1999-302735 [25] WPIDS
 DNC C1999-088807
 TI New bacteria species useful for producing acidified milk products or soft white-cheese;
 DC B04 D13 D16
 IN DESACHY, P; GAIER, W; NEESER, J; POT, B; PRIDMORE, R D; STINGELE, F; PRIDMORE, D
 PA (NEST) SOC PROD NESTLE SA
 CYC 48
 PI WO 9920739 A2 19990429 (199925)* FR 28p
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
 OA PT SD SE SZ UG ZW
 W: AU BG BR CA CN CZ HU ID IL JP KR MX NO NZ PL SG TR US
 AU 9911547 A 19990510 (199938)
 EP 1023435 A2 20000802 (200038) EN
 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT SE
 BR 9813071 A 20000815 (200045)
 MX 2000003283 A1 20001101 (200163)
 JP 2001520035 W 20011030 (200202) 39p
 AU 743435 B 20020124 (200221)
 NZ 503319 A 20020426 (200236)
 ADT WO 9920739 A2 WO 1998-EP6636 19981009; AU 9911547 A AU 1999-11547 19981009; EP 1023435 A2 EP 1998-954433 19981009, WO 1998-EP6636 19981009; BR 9813071 A BR 1998-13071 19981009, WO 1998-EP6636 19981009; MX 2000003283 A1 MX 2000-3283 20000404; JP 2001520035 W WO 1998-EP6636 19981009, JP 2000-517060 19981009; AU 743435 B AU 1999-11547 19981009; NZ 503319 A NZ 1998-503319 19981009, WO 1998-EP6636 19981009
 FDT AU 9911547 A Based on WO 9920739; EP 1023435 A2 Based on WO 9920739; BR 9813071 A Based on WO 9920739; JP 2001520035 W Based on WO 9920739; AU 743435 B Previous Publ. AU 9911547, Based on WO 9920739; NZ 503319 A Based on WO 9920739
 PRAI EP 1997-203245 19971017
 AB WO 9920739 A UPAB: 19990630

NOVELTY - New lactic acid bacteria species.

DETAILED DESCRIPTION - The new strains of lactic acid bacteria (A) have a 16S ribosomal RNA characteristic of Streptococcus but have a pattern of total protein, in sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE), that is characteristic of the strain CNCM I-1920, but different from that of all known species of Streptococcus (both species currently classified in this genus and those previously classified but now renamed).

INDEPENDENT CLAIMS are also included for the following:

- (1) food and pharmaceutical compositions containing (A);
- (2) polysaccharide (I) secreted by strain CNCM I-1924, containing glucose, galactose and N-acetylglucosamine in ratio 3:2:1; or
- (3) food and pharmaceutical products containing (I).

ACTIVITY - Probiotic.

MECHANISM OF ACTION - None given.

USE - (A) are used to produce foods, particularly acidified milk products or soft white cheese. Also (I), secreted by (A), is used to make food products, particularly hypoallergenic feeding formulations for infants or allergy sufferers. (A) and (I) may also be used in pharmaceutical compositions, particularly for restoring lactic acid bacteria in the intestinal microflora and to provide a diet balanced as regards essential complex sugars.

ADVANTAGE - Some strains of (A) are able to grow at both mesophilic

and thermophilic temperatures, so are suitable for producing both yoghurt-type products (at 45 deg. C) or soft cheese (at 28 deg. C). This avoids the problem of fouling of machinery caused by thermophilic organisms. Other strains of (A) increase the viscosity of the medium (texturizing biotype), with a greater effect than known texturizing strains (this effect may be observed under both mesophilic and thermophilic conditions). A hydrolyzate of (I) has a sugar composition similar to that of human milk.

TECH UPTX: 19990630

TECHNOLOGY FOCUS - BIOLOGY - Preferred bacterium: For (A), the profile of total proteins (obtained by culture in MRS medium for 24 hr at 28 degrees Centigrade, then extraction and SDS-PAGE) has a Pearson degree of correlation of at least 78, relative to the profile produced under identical conditions from CNCM I-1920.

(A):

(a) can ferment D-galactose, D-fructose, D-mannose, N-acetyl-D-glucosamine, salicin, cellobiose, maltose, lactose, sucrose and raffinose;

(b) has optimum growth at 28-45 degrees Centigrade (i.e. mesophilic/thermophilic biotype);

(c) ferments semi-skimmed milk at 38 degrees Centigrade to pH 5.2, producing a medium of viscosity over 100 mPa.sec at shear rate 293 sec⁻¹ (texturizing biotype) and

(d) produces an exopolysaccharide containing glucose, galactose and N-acetylglucosamine in ratio 3:2:1.

(A) have the morphology characteristic of *Lactococcus lactis*.

Preferred compositions: These preferably contain (I) in hydrolyzed form, as a mixture of oligosaccharides containing 3-10 sugar units, particularly formulated with whey protein hydrolyzate. (A) can be incorporated as a fresh, concentrated or dried culture.

Preparation: To recover (I), typically a culture is treated with alcohol or trichloroacetic acid to precipitate proteins and bacteria (which are centrifuged off), and then (I) precipitated from the residual solution by adding e.g. acetone. Optionally (I) is further purified by gel filtration or affinity chromatography. (I) is hydrolyzed using 0.5N trifluoroacetic acid at 100 degrees Centigrade for 30-90 min.

Isolation: Several different lactic bacteria have been isolated from Swiss dairies and characterized genetically and by physiology to define a new group of *Streptococcus*, sufficiently similar to constitute a new species. These strains have been deposited as CNCM I-1920 to 1926. All these strains contain a sequence identical with, or similar to, a 1522 bp cDNA sequence reproduced (derived from 16S ribosomal RNA).

L8 ANSWER 3 OF 10 WPIDS (C) 2002 THOMSON DERWENT

AN 1998-109347 [10] WPIDS

CR 1992-080068 [10]; 1993-019795 [03]; 1995-138929 [18]; 1995-365798 [47]; 1996-238770 [24]; 1996-505408 [50]; 1998-167950 [15]; 1998-229828 [20]; 1999-119886 [10]; 2001-610636 [62]

DNC C1998-035861

TI New aerobic, Gram-positive, alkaliphilic bacteria - isolated from alkaline soda lakes; used for producing alkali-tolerant enzymes.

DC B04 D13 D15 D16 D18 D25 F06

IN COLLINS, N C; GRANT, W D; JONES, B E

PA (GEMV) GENENCOR INT INC

CYC 1

PI US 5707851 A 19980113 (199810)* 44p

ADT US 5707851 A Div ex US 1992-903786 19920624, US 1994-314045 19940928

FDT US 5707851 A Div ex US 5401657

PRAI US 1992-903786 19920624; US 1994-314045 19940928

AB US 5707851 A UPAB: 20011203

A new single strain of aerobic, Gram-positive, short, irregular, rod-shaped, obligate alkaliphilic bacterium has the following characteristics: (a) forms cream-yellow, small, circular colonies; (b) optimum growth above pH 8; (c) gives a positive response in gelatin hydrolysis, galactose, beta -glucosidase, arginine, bacitracin, N-acetyl-D-glucosamine, **cellobiose**, inosine and uridine tests; and (d) gives a negative response in maltose, acetate, D-glucose, D-melibiose, propionate, valerate, glycogen, serine, ampicillin, penicillin G, methicillin, tetracycline, methyl pyruvate, monomethyl succinate and alpha -ketobutyric acid tests.

A different strain of aerobic, Gram-positive, coryneform, obligate alkaliphilic bacterium has the following characteristics: (a) forms mature colonies that are glistening, bright orange-red; (b) grows optimally between pH 9 and 10; (c) gives positive results in arginine, methionine, glycine, valine, methicillin, tetracycline, bacitracin, alpha -cyclodextrin, Tween 40, methyl pyruvate, monomethyl succinate, beta -hydroxybutyric acid and bromosuccinic acid tests; and (d) gives a negative response in gelatin hydrolysis, fumarate, fructose, galactose, D-saccharose, D-melibiose, glycogen, L-serine, beta -glucosidase, N-acetyl-D-glucosamine, **cellobiose**, D-sorbitol, D-trehalose and turanose tests.

USE - The new bacterial strains are used for producing alkali-tolerant enzymes that can be used in applications requiring a high pH, e.g. detergent compositions, in leather tanning, in the food, waste-treatment and textile industries, and for biotransformations such as the production of pure enantiomers and the production of natural pigments. (EL)

Dwg.0/4

L8 ANSWER 4 OF 10 WPIDS (C) 2002 THOMSON DERWENT

AN 1993-384121 [48] WPIDS

DNC C1993-171041

TI Synthesis of di O-methyl-D-glucose - for use as specific antigen determinant of Mycobacterium leprae, with potential in diagnostics and vaccine prodn. field.

DC B03 D16

IN BAI RAMOVA, N E; BOVIN, N V

PA (BIOU) BIOTECH RES INST

CYC 1

PI SU 1775404 A1 19921115 (199348)* 5p

ADT SU 1775404 A1 SU 1987-4275840 19870305

PRAI SU 1987-4275840 19870305

AB SU 1775404 A UPAB: 19940120

The method refers to synthesis of 3,6-di-O-methyl-D-glucose, (I), which acts as specific antigene determinant for Mycobacterium leprae. New cpd. 1,2-O-alkylidene-4-O- (per-O-methyl- hexopyranosyl)- 3,6-di-O-methyl-D-glucopyranose, of formula (II), where R is CH₃ or C₆H₅, is used as intermediate prod. for synthesis of (I).

(I) is obtd. by hydrolysis of (II) with mixt. of trifluoroacetic, acetic and in hydrochloric acid at ratio (4+/-0.4):6+/-0.6):(3+/-0.3) at 90-100 deg.C. (II) can be obtd. using easily available derivs. of disaccharides, lactose, maltose, and **cellobiose** as starting materials, by **acetylation**, bromination and reaction with tetrabutyl ammonium bromide and sodium borohydride, with chromatographic purificn. The method increases yield of (I) to 70-74%. Produced (I) can be used in diagnostics and in mfr. of vaccines.

USE/ADVANTAGE - As the method of synthesis of cpd. (I), having properties of specific antigene determinant for Mycobacterium lepra. The method increases yield of (I). Bul.42/15.11.92

Dwg.0/0

L8 ANSWER 5 OF 10 WPIDS (C) 2002 THOMSON DERWENT
 AN 1993-368704 [46] WPIDS
 DNC C1993-163640
 TI Rapid large scale prepn. of alpha-D-cellobiose octa acetate - by one-step **acetylative** degradation of cellulose or cellulose acetate.
 DC B03
 IN BERNARD, B L; HYATT, J A; NAYLOR, D M; SANDER, T L
 PA (EAST)-EASTMAN KODAK CO
 CYC 19
 PI WO 9322322 A1 19931111 (199346)* EN 16p
 RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
 W: CA JP
 US 5294703 A 19940315 (199411) 4p
 ADT WO 9322322 A1 WO 1993-US3673 19930419; US 5294703 A CIP of US 1992-877634 19920501, US 1993-44344 19930407
 PRAI US 1992-877634 19920501; US 1993-44344 19930407
 AB WO 9322322 A UPAB: 19940103
 Novel prepn. of alpha-D-cellobiose octaacetate (I) comprises (a) treating cellulose or cellulose acetate with a mixt. of acetic anhydride, acetic acid and a strong acid while keeping at below 80 deg. C; (b) heating at 35-65 deg. C for 8-36 hrs. (esp. at 48-52 deg. C or 20-35 hrs. and followed by cooling to 15-25 deg. C when cellulose acetate is used as the starting material), opt. with addn. of (I)-seed crystals during the heating, such crystal addn. being followed by cooling to 0-30 deg. C; and (c) adding a 1-5C alcohol to quench any remaining acetic anhydride.
 The strong acid is H2SO4 or methanesulphonic, tri-chloromethanesulphonic, chlorosulphonic or trifluoromethanesulphonic acid. The 1-5C alcohol is MeOH (esp. pref'd.), EtOH, n- or i-PrOH or n-BuOH.
 USE/ADVANTAGE - (I) is useful in the synthesis of prodrugs such as the Tigogenin beta-cellobioside of US4602003 and 4602005 used in treatment of hypercholesterolemia and atherosclerosis. This one step method overcomes the reaction time and reaction vol. problems associated with the Braun synthesis (Org. Synthesis, Collective Vol II, p.124, (1943). Further, cellulose acetate can be subtd. for cellulose as starting material so that acetylation of the OHs can occur prior to the chain degradation and so give a slightly higher yield, albeit with a somewhat longer reaction time.
 Dwg.0/0

L8 ANSWER 6 OF 10 WPIDS (C) 2002 THOMSON DERWENT
 AN 1993-270159 [34] WPIDS
 DNC C1993-120686
 TI Bleaching of cellulose pulp to give good brightness - by treating aq. alkaline slurry of pulp with oxygen and peroxide in presence of acyl cpd. or oligosaccharide, etc..
 DC F09
 PA (SANN) SANYO CHEM IND LTD
 CYC 1
 PI JP 05186988 A 19930727 (199334)* 4p
 ADT JP 05186988 A JP 1992-19472 19920107
 PRAI JP 1992-19472 19920107
 AB JP 05186988 A UPAB: 19931119
 Bleaching of (P) pulp comprises treating (S) an aq. alkaline slurry of (P) with O2 and/or peroxide in the presence of (A) a mono or oligo saccharide or acylated cpd..
 (A) is pref. glucose or its acetylated cpd.. (A) is pref. of diose, triose, (D- and L-glyceraldehyde), hexose, tetrose, maltose, cellobiose, raffinose, etc., opt. substd. with acyl gp.

derived from 1-30C aliphatic carboxylic acid e.g., formyl, acetyl, diacyl, benzoyl, etc.. Amt. of (A) is pref. 0.01-10 wt.% of absolute dry pulp based on (S).

USE/ADVANTAGE - Cellulose pulp can be bleached by oxygen bleach. The bleached pulp has good brightness and can be obtd. without lowering strength of the pulp.

Dwg.0/0

L8 ANSWER 7 OF 10 WPIDS (C) 2002 THOMSON DERWENT
 AN 1989-257437 [36] WPIDS
 DNC C1989-114441
 TI New fluorine-contg. glycoside(s) and their acylate(s) - used against termites and wood-rotting fungi.
 DC C02
 IN HAYASHIYA, K; KITAHARA, K; MASUTANI, T; SEKI, E; YAMAOKA, R; YOSHIMURA, T; YOSHIMURA, T H
 PA (DAIK) DAIKIN IND LTD
 CYC 7
 PI EP 331089 A 19890906 (198936)* EN 10p
 R: DE FR GB
 JP 01308402 A 19891213 (199005)
 CN 1035512 A 19890913 (199029)
 US 5023327 A 19910611 (199126)
 CA 1326665 C 19940201 (199410)
 ADT EP 331089 A EP 1989-103433 19890227; JP 01308402 A JP 1989-47092 19890227;
 US 5023327 A US 1989-315535 19890227; CA 1326665 C CA 1989-592199 19890227
 PRAI JP 1988-46917 19880227; JP 1989-47092 19890227
 AB EP 331089 A UPAB: 19930923
 Glycosides of the formulae (I) and (V) are new. n is an even number of 2-20; m is 0, 1, 2, 3, 4 or 5; R is 2-5C acyl. Pref. n is an even number of 12-20, (16 or 18).
 USE - (I) destroy organisms which generate energy through the decomposition of glucose, esp. termites e.g. (optotermes formosanus Shiraki, Reticulitermes speratus Kolbe and Cryptotermes domesticus Haviland, and wood-rotting fungi. These organisms contain beta-glucosidase decomposes (I) to give the alcohol HO-(CH₂)_n-F (IV) which is toxic to the organisms. Other organisms, partic. mammals, have alpha-glucosidase but no beta-glucosidase, so they do not liberate (IV). Thus (I) has selective toxicity against termites and wood-rotting fungi. In use, it is dissolved in a solvent at 10-50 wt.% concn. and carried on a carrier e.g. paper or wood chips. (V) are intermediates in the prepn. of (I).
 0/0

L8 ANSWER 8 OF 10 WPIDS (C) 2002 THOMSON DERWENT
 AN 1985-114304 [19] WPIDS
 DNC C1985-049653
 TI New tocopherol derivs. - having antioxidant activity, peripheral vasodilating activity etc..
 DC B02
 PA (SUNZ) SUNSTAR KK
 CYC 1
 PI JP 60056994 A 19850402 (198519)* 5p
 JP 01055278 B 19891122 (198950)
 ADT JP 60056994 A JP 1983-166413 19830908
 PRAI JP 1983-166413 19830908
 AB JP 60056994 A UPAB: 19930925
 Derivs. of formula (I) are new. (R1 is glucose residue, galactose residue or cellobiose residue or acetylated deriv. residue of the glucose, galactose or cellobiose; R2 and R3 are each H or

methyl).

Typical (I) are dl-alpha-tocopheryl glucoside, dl-alpha-tocopheryl galactoside, dl-alpha-tocopheryl cellobioside, dl-alpha-tocopheryl galactoside, 6-O-(beta-2,3,4,6-tetraacetyl glucopyranosyl)-dl-alpha-tocopherol. etc.

USE/ADVANTAGE - (I) may be used as medicines having anti-oxidant activity, peripheral vasodilative activity, etc. Due to the introduction of the saccharose residue, R1, the stability and absorbability of (I) is improved.

0/0

L8 ANSWER 9 OF 10 WPIDS (C) 2002 THOMSON DERWENT

AN 1977-21975Y [01] WPIDS

TI Device for osmotic release, esp. of medicaments - with a semipermeable wall contg. a stabiliser.

DC A96 B07 P32 P33 P34 Q32

PA (ALZA) ALZA CORP

CYC 15

PI BE 848639 A 19770316 (199301)*

NL 7613110 A 19770526 (197723)

DE 2653232 A 19770608 (197724)

JP 52064419 A 19770527 (197727)

SE 7613035 A 19770620 (197727)

DK 7605192 A 19770801 (197734)

FR 2332008 A 19770722 (197734)

ZA 7606900 A 19770913 (197746)

US 4077407 A 19780307 (197813)

GB 1528265 A 19781011 (197841)

AT 7608546 A 19791015 (197944)

IL 50851 A 19791130 (198002)

CA 1074653 A 19800401 (198015)

CH 629957 A 19820528 (198224)

IT 1070481 B 19850329 (198534)

JP 60058724 B 19851221 (198604)

DE 2653232 C 19890824 (198934)

NL 187298 B 19910318 (199114)

PRAI US 1975-634859 19751124; US 1977-864954 19771227

AB BE 848639 A UPAB: 19930901

Device comprises a wall defining a compartment contg. the active agent. The wall is made of material permeable to the liq. medium but practically impermeable to the active agent, and has an opening through which the active agent passes into the liq. medium under the influence of osmotic pressure. The wall material contains a stabiliser which makes it practically inert to the liq. medium and the active agent.

The wall material is pref. a cellulose ester contg. 5

cellobiose units in which the ester acyl gps. are of formula R4CO (where R4 is H, 1-20C alkyl or 2-20C alkenyl), esp. cellulose acetate. The stabiliser is pref. a cellulose deriv. in which the OH gps. are opt. substd.

The device is esp. useful for the controlled release of medicaments, e.g. by insertion into the gastrointestinal anal or vaginal tract or under the eyelid.

L8 ANSWER 10 OF 10 WPIDS (C) 2002 THOMSON DERWENT

AN 1975-10940W [07] WPIDS

TI 4-(N,N-bis-(2-chloroethyl)-amino)phenol glycosides - from peracetylated sugars and the corresponding phenol hydrochloride.

DC B05

PA (ARND-I) D. ARNDT

CYC 1

PI DD 109376 A 19741105 (197507)*

PRAI DD 1973-173203 19730831

AB DD 109376 A UPAB: 19930831

Process for preparing nitrogen mustard glycosides of formula (I): (where R is opt. **acetylated** sugar residue e.g. arabinose, xylose, or **cellobiose**), comprises reacting peracetylated sugar derivs. with the hydrochloride of 4-

N,N-bis-(2-chloroethyl)amino phenol (II) in the melt in the presence of catalytic amts. of p-toluenesulphonic acid and if necessary subsequently deacetylating the product:]USE/ADVANTAGE]The products which could previously only be made by multi-stage processes, are useful as transport forms of cytostatic agents, from which aglycones (the effective cytostatic agent) can be released by enzymatic or hydrolytic splitting.